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Bill

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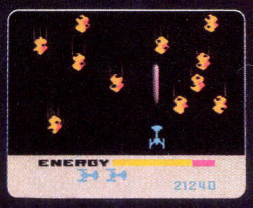

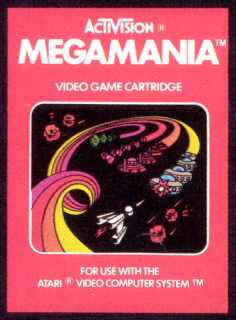

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VIDEOGAMING ILLUSTRATED

December 1982

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Contents

The Keyboard	6
Eye On	7
Close Up: Videogames, the Inside Story Part II	11
Focus On: Videogame E.T.s	13
V.I.P.: Cliff Robertson	15
Supergaming	17
Cinema: Halloween III	19
Conquering: The Incredible Wizard	24
Preview: New Games	27
Conquering: Pitfall	30
Conquering: Haunted House	32
Arcadia: The Exidy Experiment	37
Conquering: Robotron 2084	42
Conquering: Zaxxon	46
Computereyes: Ulysses and the Golden Fleece	49
Meet the Original: Zaxxon	52
Input: Letters from Readers	54
Print Out	56
Championship Videogaming: Readers' Strategies	58
Star Words	64
You Read It Here First	66

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THE COVER

E.T., the star of what is fast becoming the most popular film of all-time, as rendered by award-winning artist Vincent DiFate. E.T. is soon to star in its very own videogame, details of which can be found in this issue of *Videogaming Illustrated*.

The keyboard

A Lesson for Wall Street

In July, a pair of dicta from stock experts caused the videogame field to shudder. The first was an analyst's widely quoted opinion that Walt Disney's motion picture *Tron* was doomed to fail at the box office; the second was another firm's pronouncement that "interest in videogames may have crested," and therefore the stock of Atari's parent company Warner Communications was not as choice as before.

Looking first at *Tron,* it was not the runaway hit for which Disney had been hoping. Nor was it the masterpiece which many of us had been expecting, the characters totally subservient to the landscape. But what miraculous landscape it was!

The Atari opinion is more outrageous. To imply that videogames have saturated the market — they're in a mere fifteen percent of American homes, under two percent internationally — exhibits less knowledge about technology than about simple mathematics. However, since technology is the common denominator in both reports, that will be the focus of this issue's mini-course for Wall Street, *Progress 101.*

Scientific innovations are the least understood of the many advances which affect our society. Change of any sort makes people uncomfortable, but they grudgingly accept most of it: football coaches who trade a star player for a promising rookie are cursed by fans but otherwise lauded for "looking ahead"; the merits of revolutionary art or literature are debated with spirit but rarely dismissed outright as trash. Only technology gets a preordained thumbs-down, whether researchers have split the atom, spliced a gene, or landed a robot on Mars.

The reason for this excoriation is simple. Science is not something we choose to support or ignore. It automatically and often drastically alters the way we live our daily lives. This happens as a result of two factors.

First, science rarely causes a gradual change. In a single lifetime we learned to fly and went to the moon; electricity was barely harnessed before we were using it to project moving pictures and, hard upon, to bring radio and TV into every household. Science can be extremely disorienting.

Second — actually a corollary of the first — science rarely causes *minimal* change. The internal combustion engine forever replaced the horse, and the surgical scalpel may have met its match in the laser. Home movies are being supplanted by home video. Science creates new ways of life, it does not merely burnish the old ways.

Which brings us back to *Tron,* Atari and their detractors.

Tron is not just a motion picture, it's a landmark. The film has flaws, as do most works which map new artistic terrain. Yet, anyone with an ounce of vision would applaud the achievement of animation by computer and encourage its future application.

As for Atari, it doesn't take a clairvoyant to recognize that videogames are no fad, their penetration of our homes in its infancy. New hardware and software are being developed by Atari and other companies, equipment which will put videogames (read: computers) in every home where there's a television. One has only to look at adventures such as *Ulysses and the Golden Fleece* (page 49) to see that videogames are maturing and destined to be the most popular entertainment medium of the future — the *near* future, in case you're concerned about your investments.

None of which is to imply that malice was intended on the part of the analysts. They were doing their jobs. The problem is that they did so without creativity or inspiration.

Persons who work in the stock market like to label their views as "bullish." We submit that often only part of the adjective is correct.

It's easy to become discouraged by bad press, particularly when you know it to be so much rot. It's natural to want to stop blazing trails when the folks back home yawn at your best efforts. Be assured, though, that when the Disneys and Ataris stop trying, the world will come to a dull, agonizing halt.

As consumers, we have the right to criticize. However, we must be quite certain that when we do so it is with perception and imagination rather than chronic short-sightedness.

Jeff Rovin
Editor-in-chief

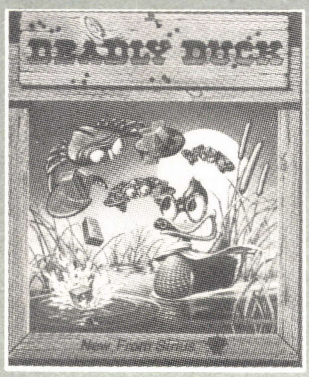
eye on

A MOTION PICTURE COMPANY GETS SIRIUS

While Universal Pictures is dipping into its film library to produce videogames based upon that studio's most popular films — *Frankenstein, Dracula, Smokey and the Bandit,* among others — its cross-town rival Twentieth Century Fox is busy inventing new themes for its line of home video cartridges.

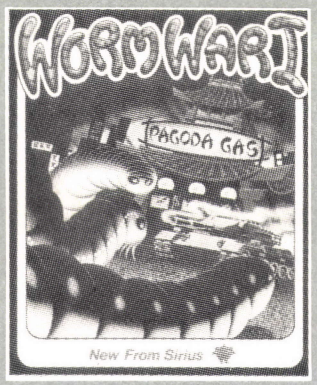
The cartridges are being produced by Sirius Software, marketed by Fox under the name of "Games of the Century." The first four titles in this Atari-compatible series are just now reaching the marketplace. They are:

Deadly Duck: an army of crabs has taken to the air and, armed with bricks and



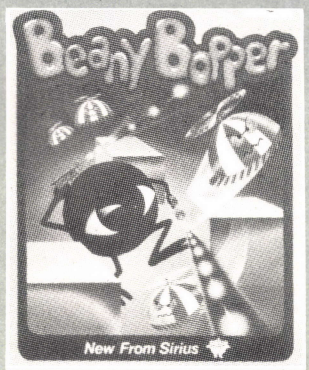
bombs, descend in marching ranks upon the web-footed hero. But Deadly Duck is thus-named for a reason. His bill is actually a gun barrel, which can unleash a fusillade of crab-cracking bullets.

Worm War I: the citizens of Teriyaki city are set upon by hordes of monster worms. These creatures slither about the city, moving around buildings as they try to reach the player's entrenchment. All that stands between the once-

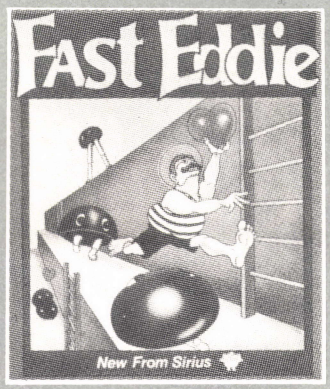


great metropolis and the mutant wrigglers is a tank armed with worm repellent. Unfortunately, your tank has only a limited amount of fuel . . .

Beany Bopper: bothersome Beanies are buzzing the city, their propeller tops



whirring. Nothing stops the irritating invaders — except for the amazing one-eyed Beany Bopper. Accoutered with a laser rifle which can pivot 360 degrees, the rotund hero must destroy the Beanies before they put the Bopper's eye out.



Fast Eddie: Eddie is on a scavenger hunt, shimmying up and down ladders to collect sundry prizes. The problem is he's not alone. There are pesky sneakers which run after him and grind the poor fellow into the ground.

The film company has entered the field as part of an objective to be a prime software supplier in a variety of home video capacities. It was Fox which helped to create the video cassette field by licensing films such as *Planet of the Apes* and *The French Connection* to software manufacturers in the medium's early days, when the prophets were predicting that no one would pay $50 to own a film.

Frank O'Connell has been named president of the new division, coming to Fox from Mattel's Intellivision wing where he was in charge of sales and marketing. .

Games of the Century began its campaign of TV commercials last month, spots which will continue through December for these four games. New cartridges will be released early next year. There are, at present, no plans to produce software for O'Connell's alma mater.

UNMOVING PICTURES

If movie studios can invade the videogame market, there's no reason the arcades can't strike back.

Pacific Novelty Manufacturing, headquartered in Marina del Rey, California, has a do-it-yourself picture center for arcades. Unlike those quaint old booths which spit out four photos for a quarter, this sleek unit coughs up a variety of computerized portraits.

You can have your face on a hundred dollar bill or on a "wanted" poster, or you

can print up a standard portrait or four mini-portraits just in case you have a lot of fans. Though the price is many times what it was for the old brown-tinted photos, the thrill of being digitized is worth the expense.

AS FOR THE REST OF YOU . . .

Our *other* readers might be more interested to learn that Activision is making a huge effort to distribute its games overseas. Twenty-five countries are the object of this push, culminating this month with the release of *Chopper Command* and *Ice Hockey* in Australia, Canada, England, France, Spain, South America, the Far East, and other sites around the globe.

The cartridges are being advertised on television and, with this current push, the campaign makes Activision games available in seventy percent of the international market.

When asked if Activision intends to provide video-

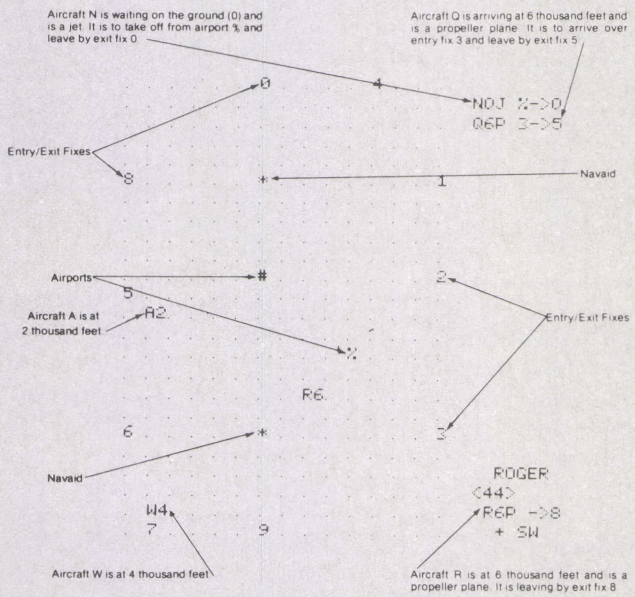
games for the Space Shuttle, one staffer quipped, "I'd be afraid to let them have *Star Master,* just in case they got carried away."

YOU CAN'T PLEASE ANYONE

As if Mrs. Scott hadn't been sufficiently piqued, *several* readers wrote to complain that we hadn't done a good job reviewing *Air Traffic Controller* in our last issue because, as Max Bent complained, "How can you cover a game and not show the screen?"

Dan Kelleher, Josh Trupin, Sandy Koufax (not the ballplayer; we got excited, too, and called), and Mr. Bent: here you are, the *Air Traffic Controller* screen. Fact is, we ran out of space last issue and had to drop it. We were too busy trying to land the bloody planes to bother with the grid.

Our thanks to Creative Computing Software for helping to wipe the egg off our faces. Now if they could only tell us how to function under six thousand feet . . .



SAMPLE SCREEN

THE VIEW FROM THE CELLAR

Videogaming Illustrated's computer wizard Martin Levitan has worked miracles with *Air Traffic Controller,* even while the rest of the staff has stumbled from one calamity to another. However, Levitan isn't the only videogame champion around. There's *Ice Hockey's* Ted Leibowitz, of course, as well as high scorers we've cited in previous *Eye Ons.*

Now there are the titans of Odyssey, championship-level players whose scores have been recorded by the company and reported in *Odyssey Adventure* magazine.

Some of the more noteworthy achievements:

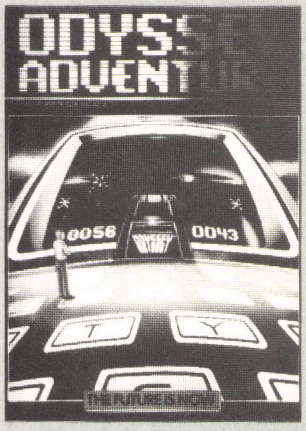
**Michael Speziale of Niles, IL garnered 832 at* Cosmic Conflict

**Stephen E. Bores of Philadelphia, PA scored the ultimate 9,999 at* K.C. Munchkin

**Dave Dahlin of Sumner, WA tallied 173 at* Monkey shines

**Kenny Jordan of Southgate, MI struggled to 7,510 points playing* UFO — *hopefully by following the patterns we laid out in our first issue.*

If you have a high Odyssey score you'd like to stack against the champions, send a photo of your screen to *Odyssey Adventure* at 30400 Van Dyke, Warren, MI 48093.



A journal whose report on high-scoring videogamers is most sobering.

THINGS NOT TO DO

They warned us! Last issue we reported how various physicians are busy decrying videogames as dangerous to our health. We scoffed at much of what they had to say. Now, however, there is *proof* that videogames *are* harmful.

Here it is, anti-gaming watchdogs, the evidence you've been waiting for! And from the mouth of Gottlieb, no less, one of the world's foremost manufacturers of arcade attractions.

In the manual which accompanies their pinball/videogame *Caveman,* Gottlieb warns that you may die if you do not short the anode plug on the picture tube. "The color monitor contains high voltages," they stress, "delivering lethal quantities of energy."

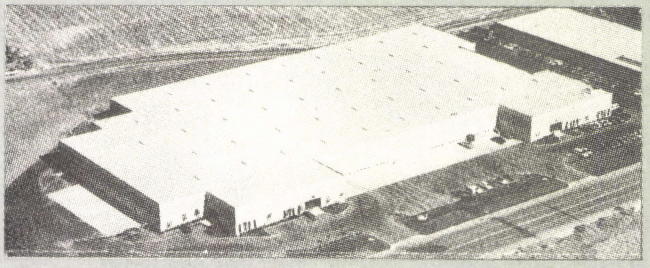
Proof positive that you should give up videogaming — at least if you're the type who really gets "into" the pastime.

YOU ARE THERE

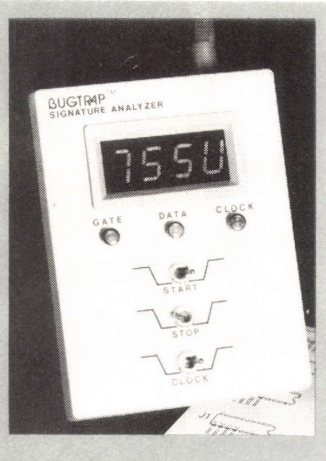
While we're on the subject of Activision, this publication actually received a nasty letter from Judith Scott, of Louisville, KY, complaining that in our first issue we should have provided a photograph of Activision's new production plant. "After all," she wrote, "if the company president is so proud of it, the least you could do is show us why."

Well, we happen to think it's an odd request; who knows what direction our magazine would take if we ran pictures of *everything* of which Jim Levy is proud.

Nonetheless, the expense of chartering a helicopter and dispatching a photographer is minimal compared to the joy we herewith bring to Mrs. Scott — and, we hope, to President Levy.



A much-requested portrait of Activision's new home in Milpitas.



FOR PROS ONLY

Just in case you have the urge to *become* a professional videogame repairperson and go poking around *safely* inside *Caveman* and its kin, *Videogaming Illustrated* offers you this informal look at one of the more fascinating "tools of the trade."

The unit is called a "signature analyzer" and trouble-shooters use it to search for flaws or "bugs" in microprocessor-based products. It does this through five simple attachments. Wires are attached to a power source,a ground — no danger of blowing yourself up if you forget, the analyzer simply won't work — a start switch, a stop switch, and a clock signal.

Mike Wicksted, co-founder of Bugtrap Instrumentation, manufacturers of the gadget, told us, "The clock signal gives you a measurement window which allows you to chart the compressed data stream generated after you start the unit." Which means, in English, that you use the signature analyzer to find out where there's a break in the system.

If a life spent mending ailing videogames appeals to you, you might want to drop a line to Cal's Coin College. The training takes only two weeks in residence and, according to owner Cal Clifford, "We teach our students to read the schematics which come packed with the game, and to apply what they've read. You can't repair videogames without knowing that."

Cal's school — the oldest in the country, now in its eleventh year — can be reached at PO Box 810, Nicoma Park, OK 73066.

EAT 'N' RUIN

Assuming you have no interest in becoming a video vet, you can always become a video restaurateur. Nolan Bushnell has done it: the man who sold Atari to Warner Communications in 1976 for over thirty million dollars has opened over fifty Pizza Time Theatres, combining food and video fun in a family environment. Destroying cities while one dines may seem dichotomous, but the venture is prospering.

Other, more formidable companies have been testing the victuals-and-video waters with very promising results. McDonald's spent over twenty million dollars in August and September promoting contests in which patrons played with "rub-away" contest cards and won Atari hardware and software, and Roy Rogers recently wrapped a *Ms. Pac-Man* exclusive, wherein players won free food and arcade versions of the game. Recently, Coca-Cola expressed interest in launching some kind of videogame tie-in as well.

Is there an atavistic link between dot-munching and lunch-munching, a subconscious reason why these two very satisfying acts go well together? We're certain the psychiatrists will pounce on this one, and you'll read about their findings right here.

IT HAD TO HAPPEN

This month and next will see the release of the first X-rated videogames, the work of a new company named "Mystique," formed by the Caballero Control Corporation (manufacturers of adult videocassettes) and American Multiple Industries which is handling the programming of the games.

The first three releases are Atari-compatible, though Intellivision versions will be produced in the near-future.

The initial games are "Custer's Revenge," "Beat 'em and Eat 'em," and "Bachelor Party."

The Custer game features the infamous soldier avoiding Indian projectiles and moving cacti, the latter of which are unpleasantly abrasive to certain of his private parts. His task is to save a woman tied to a pole, who rewards him in the expected way. There were no details available on the other two cartridges.

Upcoming cartridges will be videogame adaptations of the most popular erotic titles produced by Caballero. In time, the Intellivoice capacity will be utilized so that the software can converse with the user.

The X-rated cartridges are only the first step in Mystique's entry into the field. They felt that the novelty of an "X" rating would set them apart from other new companies, — and it has. Advance orders of the games have been in excess of one million, quite impressive in view of the cartridges' $50 pricetag. But they hope to branch into family videogames as soon as possible, most likely by licensing existing characters from children's television or the comic pages.

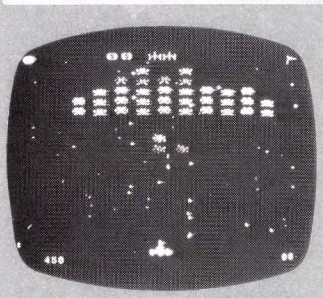
One can only wonder how this will fuel the arguments of the self-styled do-gooders who claim that videogames are a corrupting influence. We'll keep you on top of it.

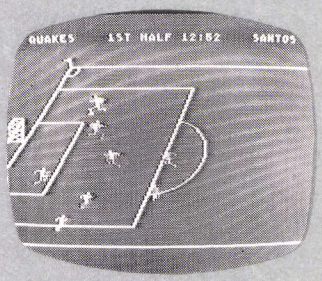
THE EMPEROR STRIKES BACK

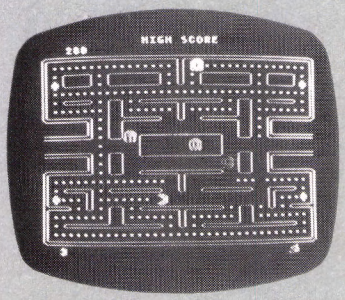
Meanwhile, the uncontested king of videogames is not letting new enterprises like The Games Channel, or even more direct competition like Activision fling it into paroxysms of terror. Atari has some ammunition of its own to help it continue carving out more and more of the marketplace.

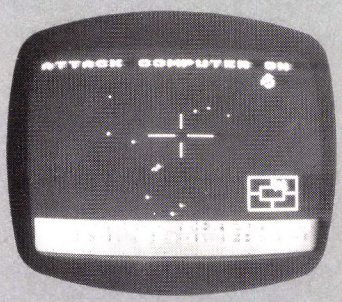
For one thing, this is the month the long-awaited Atari 5200 goes on sale. Retailing for $299, the unit offers graphics which are comparable to those of Intellivision and Coleco-Vision, and sound effects to match. This unit is not intended to make the current Atari system obsolete. Rather, according to Atari consumer electronics executive Michael Moone, "We have created two home game systems in the same

eye on









***The new 5200 videogame system, with screens showing its superb graphics:* Galaxian, Soccer, Pac-Man, *and the exciting* Star Raiders.**

spirit in which an automobile manufacturer builds different models to suit different tastes."

The 5200 controls are equally state-of-the-art, combining a joystick, paddle, and keyboard in a single hand-held unit. Early in 1983, Atari will introduce a Trak-Ball for the unit, giving players the same 360 degree control they currently enjoy only in arcade attractions such as *Centipede* and *Kick.* A voice synthesizer module will be released concurrently for yet another dimension of gameplay.

Ten game cartridges have already been shipped for the 5200, with home versions of the arcade hits *Qix, Centipede,* and *Defender* available in December. The retail price of these ranges from $31.95 to $39.95.

Nor is Atari letting their lower-priced videogame console sit idle. Thirteen cartridges are being introduced in the waning months of 1982, among them:

**Earth World:* the first cartridge of the *SwordQuest* series, now on sale. The player roams through twelve zodiac rooms, using magical objects to open doors and release clues, battling attackers all the while.

**Fire World:* the second of the four *SwordQuest* games, to-be-released next month. It will be followed in 1983 by *Air World* and *Water World.*

**Fail Safe:* a more detailed version of the tank and plane warfare from *Combat,* now on sale.

**Frog Pond:* previewed on page 00, on-sale next month.

*New versions of old sports cartridges: Baseball (available now), Volleyball (November), Football (December), and Soccer (January).

Finally, there is the Atari-Lucasfilms union which is sure to elevate gameplay to new heights. As announced last issue, the companies which create videogames and *Star Wars* have joined to develop innovative new coin-operated and home games. As Lucasfilms' president Robert Greber points out, "Lucasfilms' feature (film) operation, combined with its computer division, is a perfect partner to Atari. Together we intend to dramatically affect the evolution of electronic entertainment industry."

Atari chairperson Raymond Kassar — "Yar" of the *Yar's Revenge* videogame — adds, "The association is a natural since both companies hold a leadership position in our respective fields."

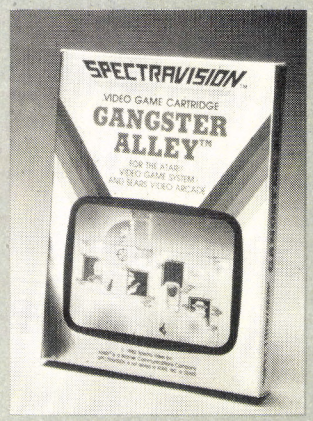
What was that some stock analyst said about interest in videogames having crested?

NEW KID ON THE BLOCK

Just when you thought it was safe to go into your local video store, briefed on what's coming from Atari and budgeted accordingly, your money is being tempted away by the first games of Spectravision. The cartridges will fit your Atari unit and, one hopes, your budget.

Currently on sale are:

**Gangster Alley,* in which the player must gun-down criminals who appear randomly at windows in an abandoned warehouse — and at the same time be wary of Nitro Ed, who skulks about the roof of the



building dropping grenades. As the game progresses, the player is forced to continue battling from daylight into night.

**Cross Fire,* a space game in which the player must destroy the evil Morpuls which have been menacing the planet Tzoris (a Yiddish word meaning "troubles"). Not only must the player liberate the galaxy, but she or he must continually monitor energy and temperature gauges.

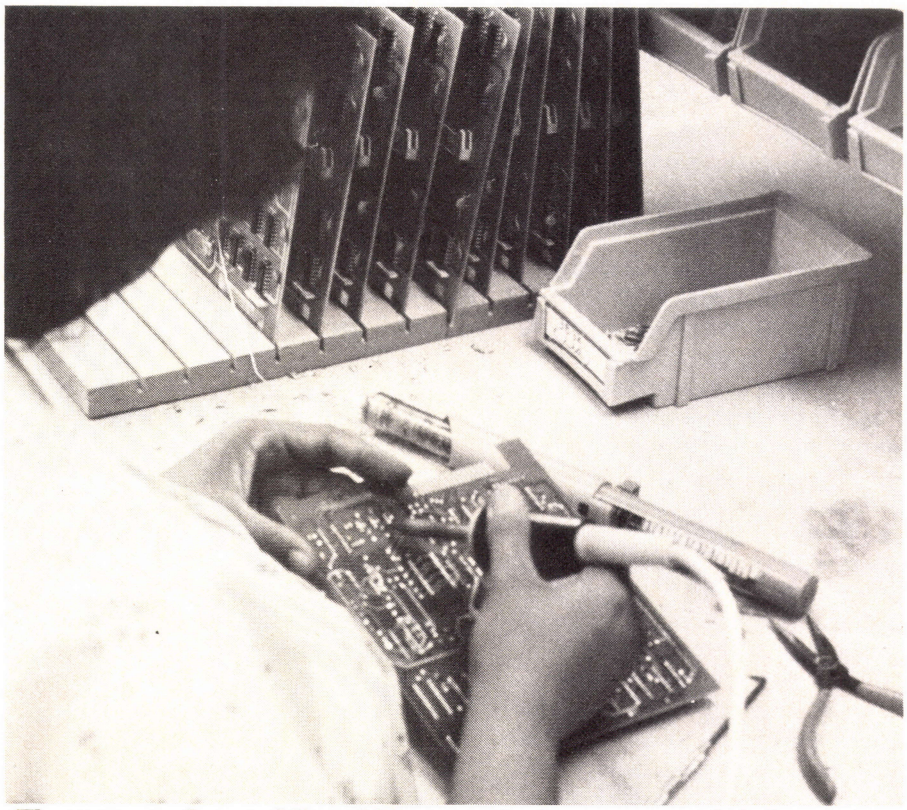
**Planet Patrol,* a game which sends the player flying across alien terrain destroying enemy bases and

Continued on page 59

THE MAKING OF VIDEO-GAMES

How and Why Games Are Manufactured

by Richard Meyers



The process of assembling videogames for home or arcade is long and arduous. Here, at Exidy, a technician solders a printed circuit board. Other boards, stacked in a rack to her left, await the woman's attention.

You've just sent your twenty-fourth idea to a videogame company after receiving your twenty-third polite form-rejection letter. Did you every stop and wonder *why* the manufacturers can't afford to work on every idea that comes their way?

"The companies are deluged with ideas," chuckles Joe Cicak, the chief of Gamexxx, an independent game designing company. "They have drawers full of ideas. Everybody in the world has an idea for a videogame. What they need to know is that the person can carry the idea out from start to finish."

It seems as if the video industry is the same as any other business. Everyone has ideas. The trick is making them reality — and, more importantly, from a business point of view, a practical and economically feasible reality. The idea is important, of course, but it's just the first step in the lengthy process of video creation.

"It is vitally important to have contacts within the industry," Cicak points out. "Whether you are an 'in house' designer or an independent, there has to be someone receptive to whom you can present your ideas. There has to be someone you can approach with ideas *and* with questions, questions like, 'Is it possible? Is it too expensive? Am I crazy?' "

Contacts within the companies are even more important. Most manufacturers won't even listen to ideas for videogames for fear of lawsuits if a finished game is similar to an unsolicited idea which came from an avid video enthusiast. They will return the idea unread and untouched rather than run the risk of coincidentally or inadvertently "borrowing" a concept from an eager writer.

Once the reception of an idea is positive, there's a lot of work the designer has to do before his or her contact can even approach other people in the company. Cicak starts his homework with extensive storyboards.

"The storyboard is the standard way of presenting any moving picture," he explains. "If you want to give someone an idea of how something is going to look you draw it in storyboard form — showing action that occurs every five or ten seconds ... or every key event."

A storyboard looks like a series of comic strips. Beneath each uniformly-sized drawing is an explanation of what is going on. "I have all the possibilities included," Cicak describes, "what would happen is *this* gizmo attacks *that* watchamacallit. The whole thing is plotted out from beginning to end."

Assuming you can get in the front door, a basic, very amorphous idea is not enough for videogame companies even to consider. It's not enough to tell them that *Star Trek* would make a great videogame. The manufacturers need to know what the starship Enterprise can do, what the Klingons will do, what Mr. Spock would do, and so on. Just as importantly, as Cicak points out, the designer has to know what he or she *can't* do.

"It is not only a matter of what has to be included," he says, "but what has to be cut out. You have to look critically at your concept and inherently know what is or isn't going to work from both a technical and aesthetic standpoint. That takes a knowledge of technology as well as common sense."

The common sense comes in handy when a designer is trying to figure out

After the boards are assembled, technicians check them under conditions which simulate actual operation. The TV screen informs the operator whether or not all systems are functioning smoothly.

what each aspect of the game has to do in order to make the whole thing a success. But the scientific approach is even more important. The greatest gimmick in the world is useless if existing equipment can't make it work.

Cicak gets around the question mark of developing technology in a clever and effective way. "I storyboard it all out in the sense of what may be possible for present systems. Then I do some storyboards that are based on what will be possible a year or two in the future."

If an intrepid new designer has gotten this far, hit upon a million dollar game idea, storyboarded it out to perfection and convinced a manufacturer that it can be mass produced at a decent cost — what then? Joe Cicak has the answer, and as usual it's anything but simple.

"Once everyone has agreed that you've got a good idea, the company gives you authorization to set up a 'design team.' If you are off on your own somewhere, say Kansas or Melbourne you can set up a design team too, only you'll probably run into a lot more problems working outside the facilities of the manufacturers. Things that would take you months, maybe years to figure out have already been perfected by the majors.

"In my case, since I have a decent track record," Cicak elaborates, "they feel confident enough to provide the vital financial and technological support I'll need to get my machines off the ground. There is an awful lot of trust involved here because you are privy to their methods and they are privy to your ideas."

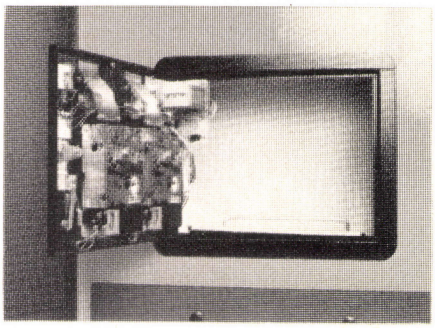
These "methods" are the stuff on which success or failure is based. These methods are what make *Pac-Man, Dig Dug,* and the *Stargate* ships do their things on the small screens.

Cicak explains, "You have to spend months and months programming on one of the companies' or on your own graphic video animation devices, units which are controlled by microprocessors. What we're doing is computer animation, just like the stuff you saw in *Tron.* In fact, *Tron* is a motion picture which exemplifies what video design is all about. We're playing around inside a video cartoon."

Utilizing a computer language which controls the electrical charges that serve as the computer's thinking process (see "Close Up" in our October issue) programmers translate concepts by Cicak and other designers into technological existence. "Half the time we're programming," Cicak reports, "the rest of the time we're 'de-bugging' what we've done. You have to make everything go the way you want it without creating kinks or loopholes that can certainly be exploited by a clever player."

To make it work requires the all-out efforts of the design team. At its most basic, this team consists of personnel in three departments, hardware, software, and what Cicak calls "conceptualization."

"The hardware is the brains, the body, the guts, of the arcade machine," Cicak defines. "That means the wires, the chips, and almost everything that goes into the machine. The software is the computer program that someone has written which will function within that hardware system. That's what makes the pictures appear."



A look inside Midway's* Kickman. *Everything you see on-screen, all the graphics and every bit of the player's input, is controlled by this small compartment laden with wires and circuits.

Unusual control panels, as in Atari's* Starship 1 *arcade attraction, may require some extra testing. Rough, down-to-business play sessions in actual arcades are required to iron out the kinks in any new design. These are the kinds of discoveries designers can't make in their cool, easy workshops.

In non-technological, perhaps more understandable terms: the hardware is the brain and the organs. The software is the collection of thoughts that make the whole thing work. "The intricacy and look of the software depends on whether you are using the company's computer system, whether you're using a satellite (ie, comparable) system, or whether you are using a system totally independent," Cicak adds.

The conceptualizer is basically the idea person — in this case, Joe Cicak himself. "I think of video game design like a movie," he says. "A movie is the result of many minds working to realize the images of a few. The best results come as a result of a solid team toiling toward a single person's inspiration. They all work toward a striking look, great action and a good story.

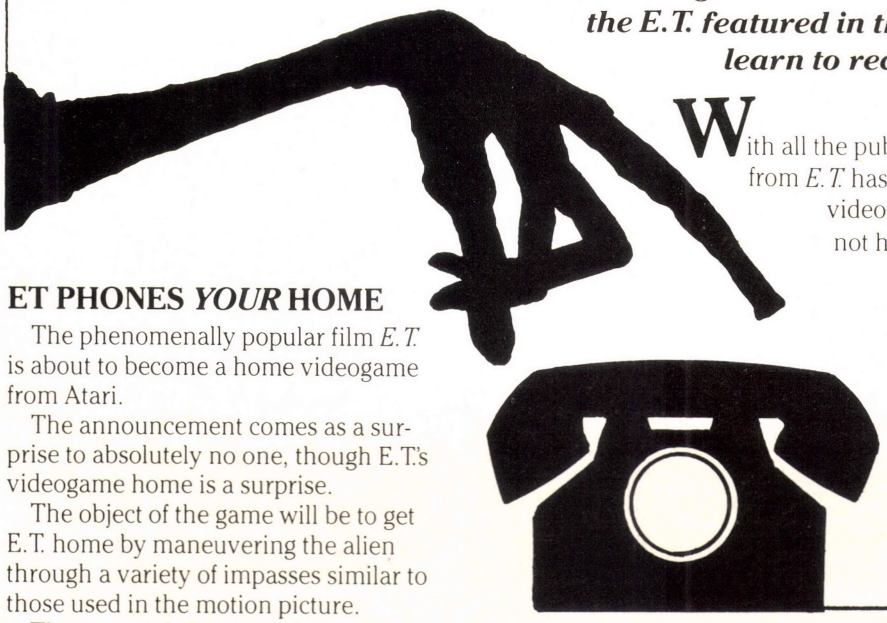
Continued on page 57

focus on

A Field Guide to

Videogame E.T.s

Videogame extraterrestials are less kindly than the E.T. featured in that popular film. Play it safe: learn to recognize the dastards on sight.



With all the publicity that pug-nosed, mud-colored alien from *E.T.* has been getting, it's easy to forget that most videogame aliens want to devour or blast you, not help you ride through the air on a bicycle.

Just in case *you* happen to be eating Reese's Pieces and an otherwordly denizen levitates your way, we've gathered a "Most Wanted" list of home videogaming's most wicked aliens, those who would sooner eat Mr. Reese than his pieces.

The following file is as complete as present knowledge allows. These intergalactic malfeasants *are* decidedly difficult to interview.

ET PHONES *YOUR* HOME

The phenomenally popular film *E.T.* is about to become a home videogame from Atari.

The announcement comes as a surprise to absolutely no one, though E.T.'s videogame home is a surprise.

The object of the game will be to get E.T. home by maneuvering the alien through a variety of impasses similar to those used in the motion picture.

The game is being touted as more than just a challenging cartridge. Atari promises that it's going to be the first "emotionally oriented" videogame.

Atari expects that, like the *Star Wars* videogames being manufactured by Parker Brothers, this E.T. game will be the first of many, and will be as much of a commercial success as their *Pac-Man* cartridge.

As noted elsewhere in our pages, Atari also has the videogame version of another popular film, *Raiders of the Lost Ark,* ready for shipping.

The *E.T.* game will be on sale early in December.

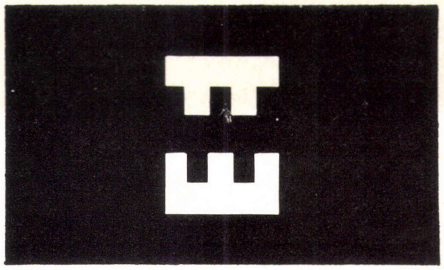
The obvious question is why Universal Pictures elected to license E.T. to an outside company rather than give the enormously lucrative property to their own newly created videogame wing.

The answer is twofold: licensing discussions with videogame companies commenced before Universal formed its videogame division — which is why *King Kong* went to Tigervision — and that there is no way the new company could have gotten out the cartridges as effectively as Atari, certainly not in time for the Christmas season.

Ironically, Atari is owned by Universal Pictures' moviemaking rival Warner Communications.

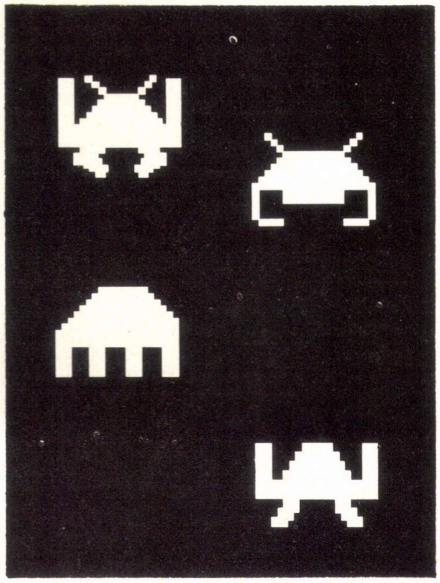
Alien Invasion

Their only calling-cards are the deadly projectiles they loose while heading earthward in rows.



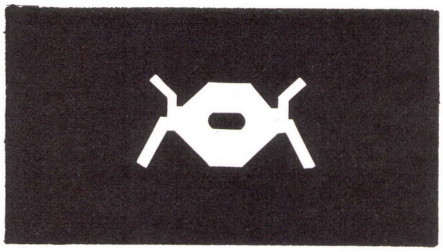
Astro Battle

More nameless terrors, descending in a phalanx and dropping bombs upon earthpersons.



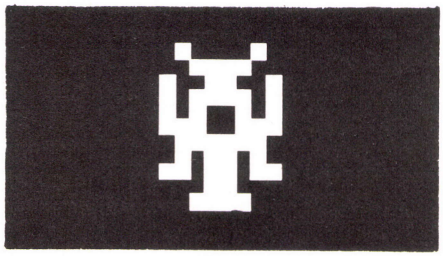
Alien Invaders-Plus

The villain here is a killer by name of Merciless Monstroth. This being is part mechanical, part biological. Its head is a domed city, its body the juncture of five twining serpents. The underbelly of the creature is an opening which emits robots, proxies which do battle for the invader. Monstroth is approximately forty feet tall and eighty feet across.



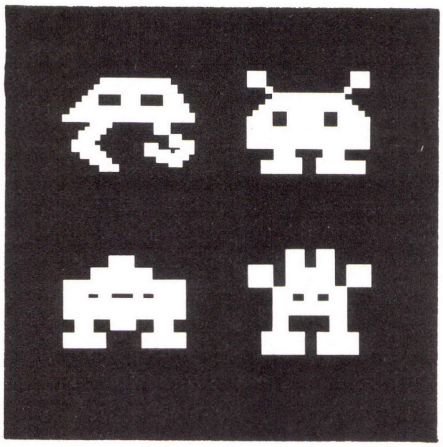
Yar's Revenge

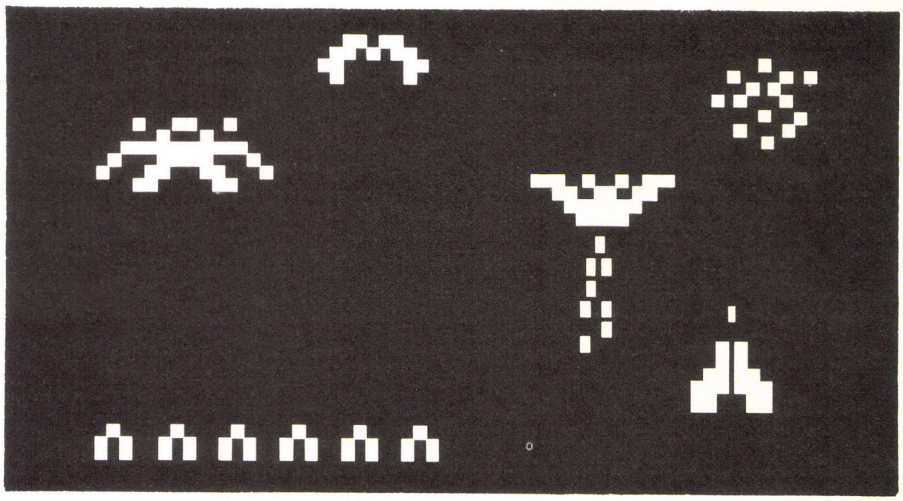
Yars dwell on the third, fourth, and fifth planets of the Razak solar system. They are descended from house flies which were borne accidentally into space onboard an interstellar craft. Mutated by radioactive dust from the crash of said vessel, they can eat anything and convert matter into powerful energy missiles. Their enemies are not humankind but the Qotile, invaders from a nearby moon. As these invaders never leave their shields, no one knows what they look like.



Space Armada

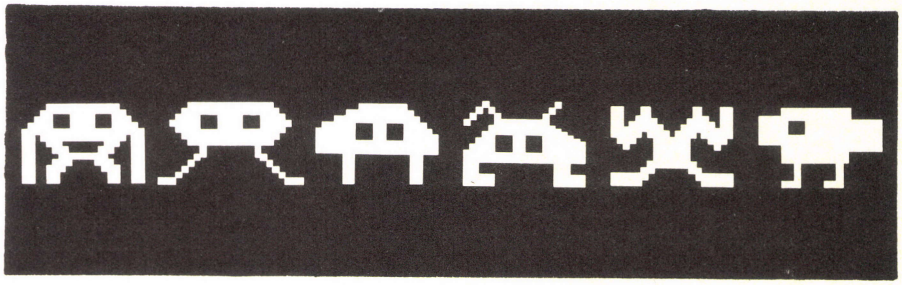
Like the monsters of *Space Invaders*, these creatures descend in rows and have no names. Also like their sinister brethren, they discharge projectiles and can become invisible.





Demon Attack

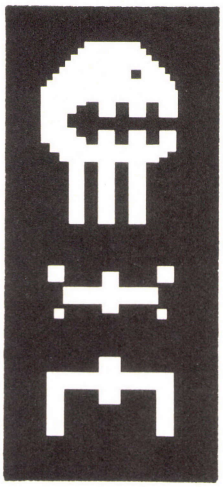
Winged predators who fly in devasting waves. Known only as "cosmic creatures," these merciless extraterrestrials unload destructive eggs in a display of unabashed hostility.

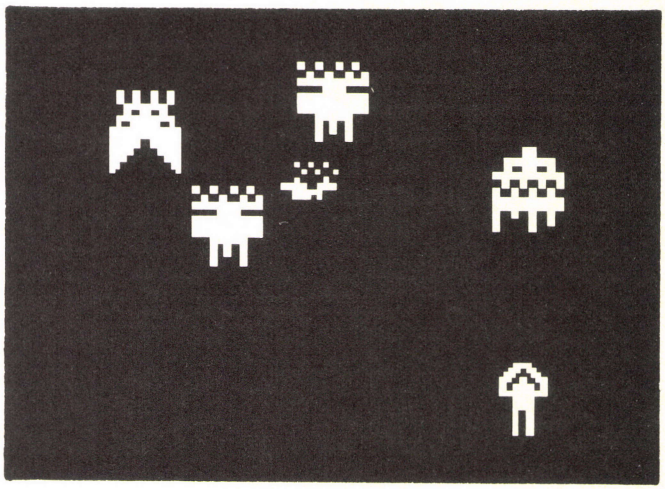


Space Invaders

The multicolored creatures move in orderly ranks, speeding up as their fellow aliens are disintegrated. They spit out bombs and, upon landing, consume laser cannons. The creatures can become invisible under certain circumstances, though all light up when one is slain.

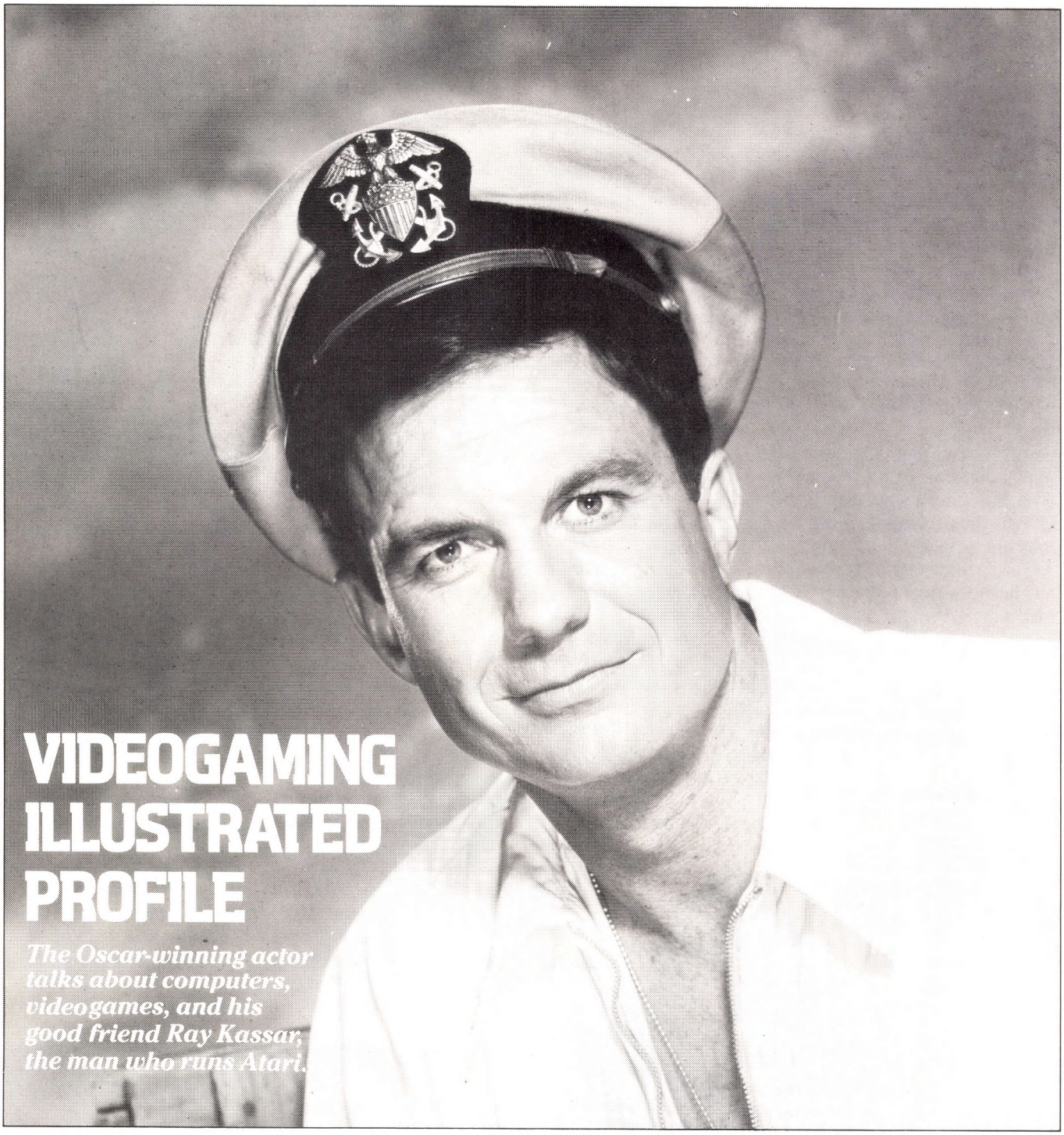
These gravity-defying entities have no names.





Space Cavern

As identified last issue, there are six inhabitants of an uncharted world in deep space. There are five kinds of Electrosauri and they come in two sizes, three large and two small. All of them are airborne and inclined to unleash concentrated — and lethal — charges of electro-molecular energy, which cause objects to dematerialize. The Marsupods are planetbound. Covered with a fine coat of hair, they live in caves and enjoy using their six massive teeth to eat earthpeople. ▲



VIDEOGAMING ILLUSTRATED PROFILE

The Oscar-winning actor talks about computers, videogames, and his good friend Ray Kassar, the man who runs Atari.

To date, Cliff Robertson has had a career of remarkable quality and diversity. Born in La Jolla, CA in 1925, he went to Antioch College and, after serving in the Second World War, joined a small acting troupe. He subsequently appeared in movies as well as television, starring in episodes of *The Twilight Zone* and *The Outer Limits,* not to mention one of the first science fiction TV series, *Rod Brown of the Rocket Rangers.*

Robertson played JFK in 1963's *P.T. 109* and won an Oscar for his performance in *Charly* in 1968. His most recent film is the science fiction epic *Brainstorm,* a picture which was two weeks from completion when star Natalie Wood died. *Brainstorm* is going to be completed and released early next year, along with Robertson's new film, directed by Bob Fosse *(All That Jazz),* in which the actor plays Hugh Hefner.

Brainstorm is a plausible adventure in which a scientist (played by Christopher Walken) working at Robertson's hi tech facility finds a means of transmitting videotape and computer-generated feelings and experiences directly into the human brain. How this process gets out of hand lends the film both its drama and title.

Q: In our pages, people have praised videogames for helping us take out our aggressions or develop hand-eye coordination. Do you have anything more "philosophical" to say about the medium?

A: Oh, I sometimes think that life itself is a videogame. When I look back I realize that we are all kind of maneuvering through pretty narrow straits sometimes, trying to avoid the shoals, the rocks, the storms. I feel that on a subliminal level, the people who play videogames are reassuring themselves. Keeping from being gobbled up or shooting down the invaders is a way of reinforcing in their own minds that right will win. They're trying to reaffirm their reason for living and working and believing.

Q: Videogames seem to represent a *better* world?

A: Certainly a more responsive one. It's a chance to be a hero for a moment. People who leave arcades seem to strut a little bit. It *can* work the other way, of course, you can be beaten. But that's only temporary. You can get as many cracks at the machine as you want, something which doesn't always happen in real life. But it translates to life, makes you realize that to win at anything you've got to be alert, keep on your toes.

Q: Why do you think that women are not as attracted as men are to the medium?

A: Society has been responsible for bringing up women to feel that they can't handle or are not as good at anything mechanical. It's a psychological, not biological reason.

Q: In *Charly*, you lambasted television as "beautifully purposeless." Do you actually feel that way?

A: Television is the most exciting communications medium that's happened in our society. The sad thing is how it's misused in terms of the programs. But when you talk programs you're talking dollars. You hear people talk about stimulating and educating through television, but the bottom line is it's got to make money. It's governed by the buck philosophy, which is why you only hear people talk about doing these things.

***Cliff Robertson isn't playing* Air-Sea Battle, *he's preparing for a bombing run in the much underrated war film* 633 Squadron.**

Q: Aren't videogames answerable to red ink!

A: Yes, but to a different end. Videogames are just the beginning, the appetizer, a way to arrest peoples' attention and excite their reactions. They don't just sit there and listen, they participate. This is a harbinger for *using* TV rather than just staring at it. We'll see all kinds of new dimensions applied to it. Today, they're like the first crossword puzzles, which took under a minute. Look at the New York *Times* puzzle compared to that!

Q: Can videogames become so complex and satisfying that they supplant passive entertainment like movies and network TV?

A: There are times when we want the storyteller to lead us, times when we want to listen. Then there are times when we want a sense of control. There's room for them both. Either/or situations don't really exist for us any more. Ever since the Russian satellite sputnik went into orbit in 1957, we've seen that nothing is impossible, that human reach is limitless and therefore so are human options.

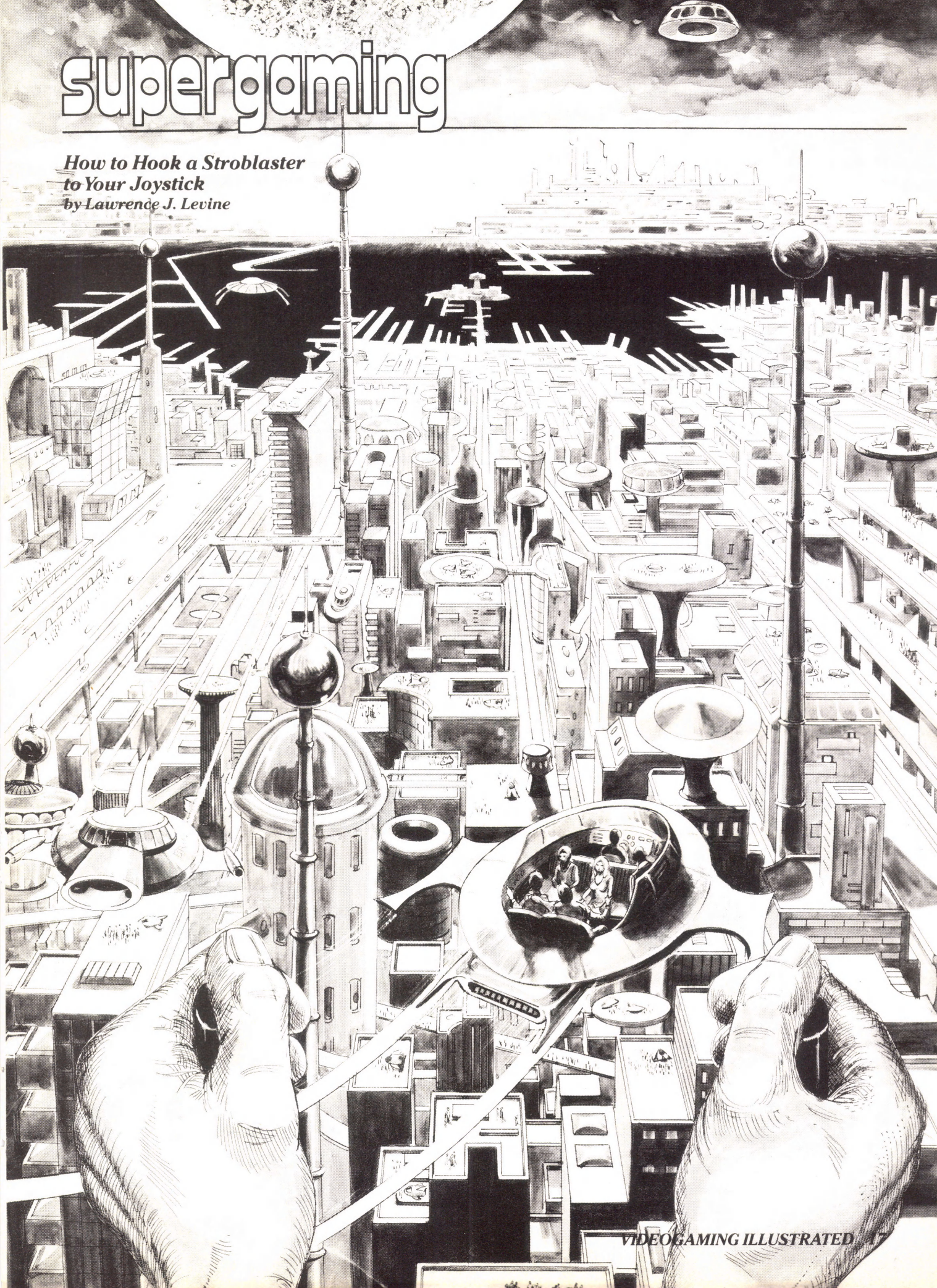
Continued on page 65

Robertson, in his Oscar-winning role as Charly.

supergaming

How to Hook a Stroblaster to Your Joystick

by Lawrence J. Levine



Last issue we told you how to build a Stroblaster. Although one can come up with numerous applications, the most obvious is using it to enhance the visual blasts caused by depressing your action button.

Following last issue's instructions, you built a unit which must operate independently of the action button — fired by another player, for example, to "blind" you in a strategic maneuver, or to help create the ambiance of battle.

This issue, we're going to explain how to hook the Stroblaster directly to your joystick so that you can generate a powerful burst of light every time you press the action button.

Figure one is the electrical schematic diagram of what you built initially. *Figure two* is the electrical schematic depicting changes which must be made in the original system to enable the flash to be operated in conjunction with the actuation of the action button.

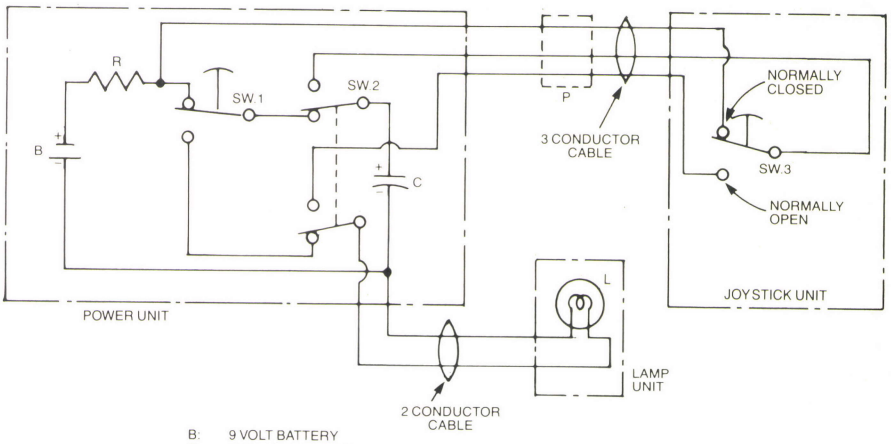
The newly added switch (SW-3) is a microswitch. (Although a trade name, the term "microswitch" has become generic through long-term usage.) The switch is of the "Z" type, although the unit actually used in this case is the "BZ." As you can see from the photograph of the completed unit it readily adapts to the needs at hand.

The microswitch is secured to the side of the joystick using 3M Super Strength Household Cement, available at most hardware stores. The same cement is used to secure the button to the actuator arm of the microswitch. Please

Switch and actuator button attached to Atari joystick.

note that the actuating arm is *not* being used to tap down the existing action button: it positions a new one entirely over the old button. This location is solely for the sake of player familiarity: you can, in fact, relocate it wherever you wish.

The actuating arm is made from a piece of spring steel — in this instance, cannibalized from a discarded windshield wiper blade. (There are usually



B: 9 VOLT BATTERY
R: 22 OHM RESISTOR
C: 2200 (μf) 16V ELECTROLYTIC CAPACITOR
SW.1: SINGLE POLE DOUBLE THROW PUSH BUTTON SWITCH
SW.2: TWO POLE DOUBLE THROW MINIATURE TOGGLE SWITCH
P: (OPTIONAL) 3 CONDUCTOR DISCONNECT PLUG & SOCKET
SW.3: SINGLE POLE DOUBLE THROW MICROSWITCH TYPE Z MOUNTED TO JOYSTICK UNIT.
L: PR-7 FLASHLIGHT BULB

FIGURE 2

two such pieces of steel imbedded in the back of the wiper rubber.)

Using the hole already in place on the microswitch, secure the arm in place using a 2-56 screw and nut. The cut length should be approximately 2 3/8″ long with a right angle bend 3/4″ from the hole. (These sizes are correct for the Atari joystick; in the case of an Odyssey unit the figures will vary, though only by fractions of an inch.)

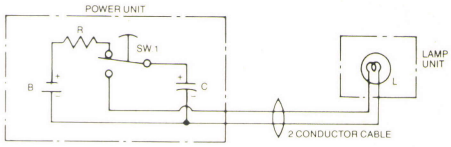
Attach approximately two feet of three conductor flexible cable to the underside of the microswitch. Wire size is not terribly important; it need be no

The disconnect plug.

larger than #22 AWG for each conductor. The other end of the cable can be terminated with a disconnect plug (as shown) or wired directly to the power unit. The former is convenient if you wish to play without Stroblaster.

Novices: make sure that in making this disconnect attachment you wire the male and female portions of the disconnect plugs so that color goes to color where the cable is concerned. The three strands of wire must emerge from the disconnect unit as though they had never been broken.

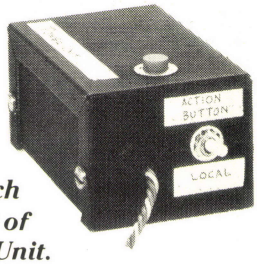
SW-2 is added to the power unit to provide for either local or action button control over the Stroblast. Follow the schematic for wiring instructions. With the switch in the "local" position, the strobe can be flashed by pressing the button installed last issue on the power box.



B: 9 VOLT BATTERY
R: 22 OHM RESISTOR
C: 2200 MICROFARAD (μf) CAPACITOR: 16 VDC (ELECTROLYTIC)
SWI: SINGLE POLE DOUBLE THROW PUSH BUTTON SWITCH
L: PR-7 FLASHLIGHT BULB

FIGURE 1

When the switch is in the "action button" position, depressing the action button will trigger the burst. In the photograph, notice that we've set our SW-2 at a right angle to the original Stroblaster action button. The schematic tells you how to make the hookup. (For additional help, if needed, refer to photograph of power unit interior.)



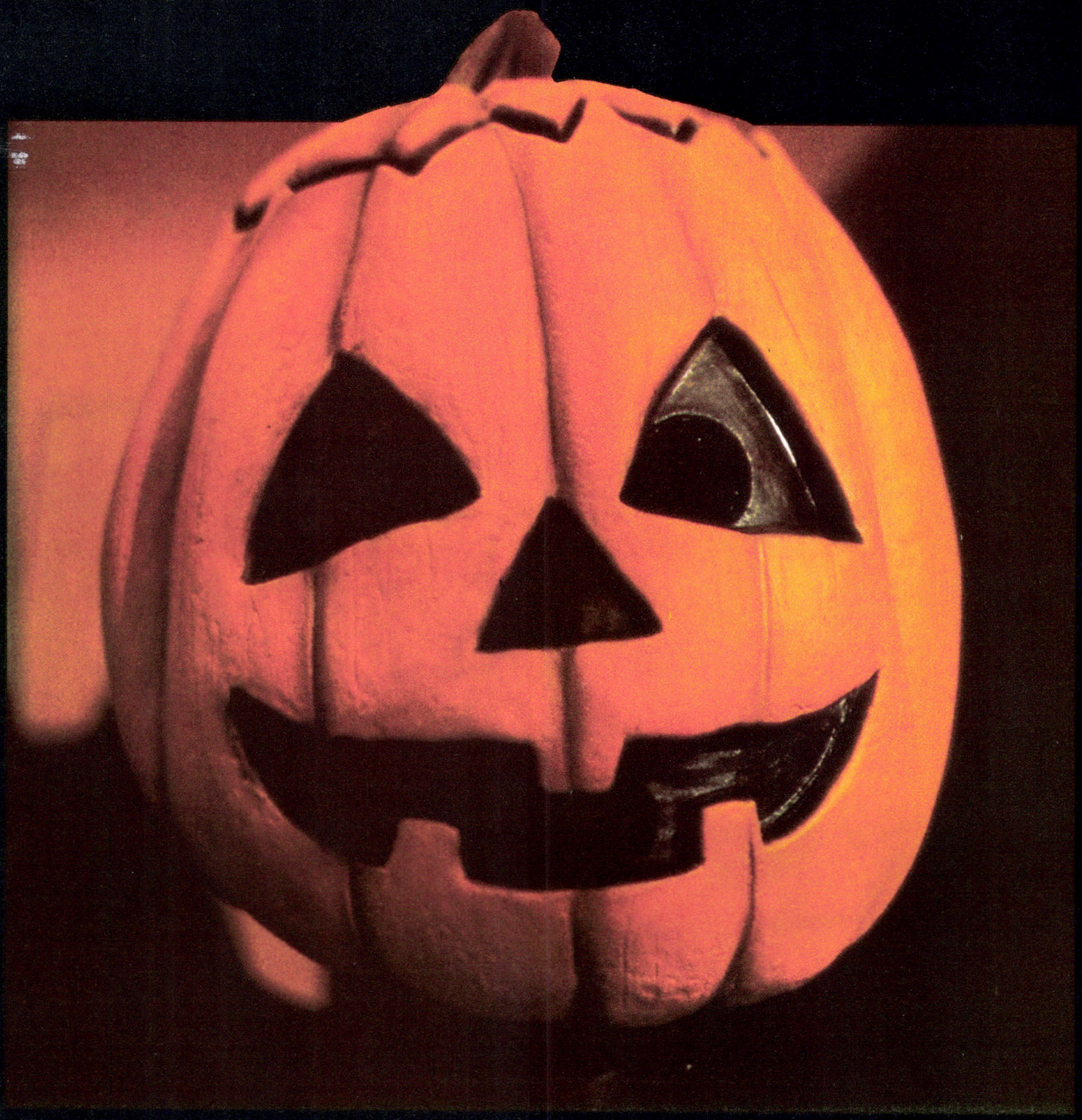
Local switch on the side of the Power Unit.

If you have no use for a local control, then the schematic shown in Figure one can be used, substituting the microswitch for the SW-1 push button switch. This makes the final unit somewhat simpler, though less versatile.

Incidentally, we found an interesting and certainly unusual way to give your unit slightly more light than with the flashlight disk we recommended last issue.

Continued on page 57

HALLOWEEN III



Witchcraft enters the computer age in a new motion picture.

Historically, movie sequels club a theme to death. Some, like *Rocky III* and *Superman II* expand the characters and situations in new directions. Others, like *Jaws 2* and *Friday the 13th, Part 2* merely recycle the plot and formula established in the first film.

Last year's *Halloween 2* belonged to the latter group. In it, a knife-wielding lunatic known as the Shape — a super-

Cochran, the sorcerer toymaker.

human killer garbed in a featureless mask — returned to menace actress Jamie Lee Curtis (daughter of Janet Leigh and Tony Curtis). Ms. Curtis had escaped his clutches in the first *Halloween*, one of the most profitable horror pictures of all-time.

Rather than bring back the shot, bludgeoned, and burned Shape, Universal Pictures took the gimmick of the mask worn by the creature and expanded it in a new and technological direction.

In the new scenario, an old toymaker named Cochran (Dan O'Herlihy) becomes disgusted with the commercialization of Halloween. An ancient festival of the dead, he feels it should celebrate witchcraft and evil spirits rather than merry costumes and candy.

From his Silver Shamrock factory in sleepy Santa Mira, California, Cochran designs three horribly beautiful masks: a pumpkin head, a skull, and a witch's face. He advertises them extensively on television and radio; because they are better-made and less expensive than anything on the market, Cochran sells millions of the masks all across the nation.

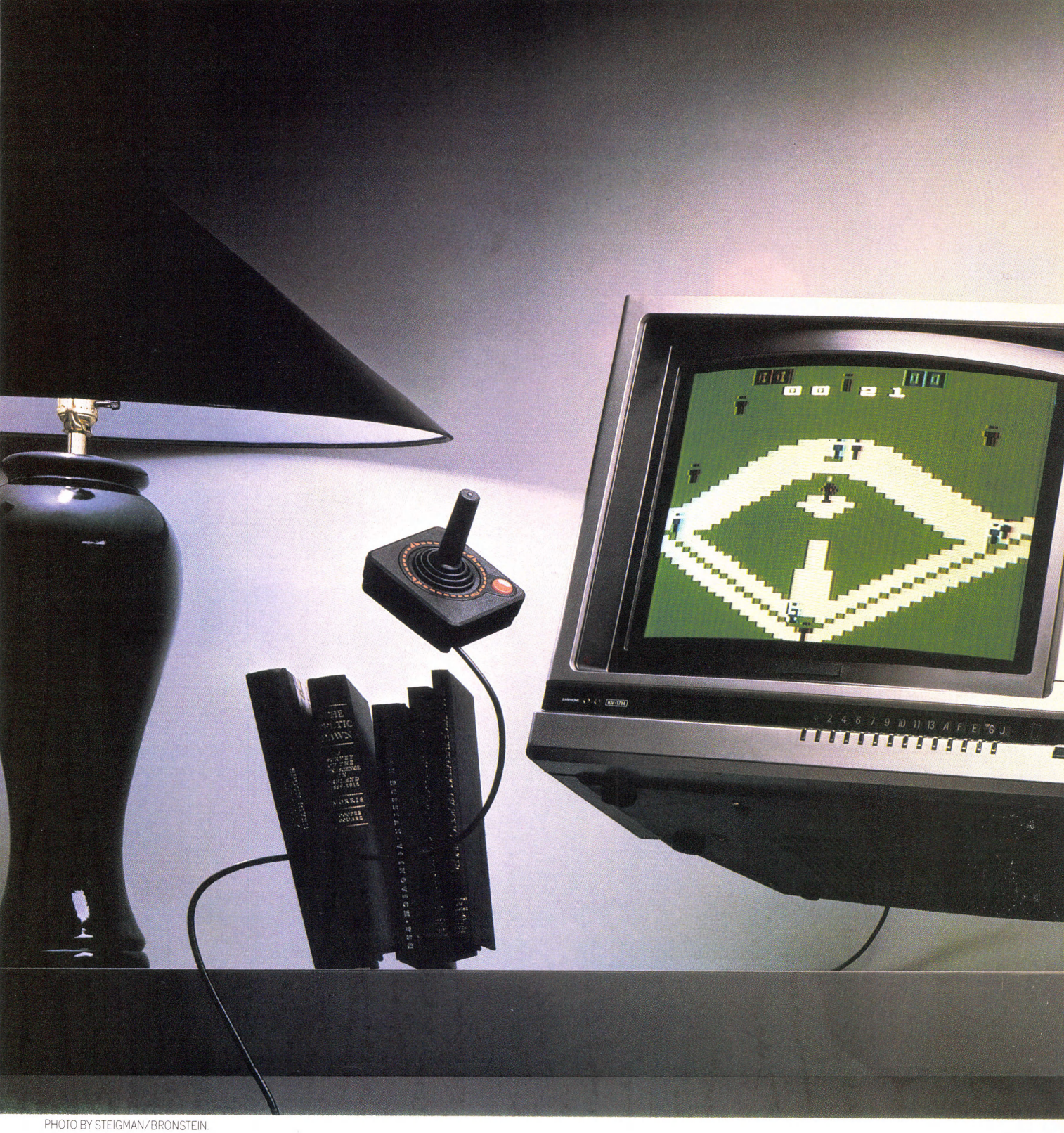
Challis and Ellie

The doctor becomes a prisoner of Cochran and his technological coven

What none of the consumers knows, of course, is that Cochran has masterminded a rather sinister plan. He has stolen a huge slab from Stonehenge, the mystical landmark in England. Breaking the monolith into microscopic pieces, he has inserted them into microprocessors, giving the computer chips magical powers. Each of his Halloween masks contains one of these microprocessors, which compel the wearers to watch the final Silver Shamrock commercial. The jingle they hear will cause the computer chip to unleasg evil on a scale the likes of which the world has never before seen:.

Concurrently, a storekeeper who sells Silver Shamrock masks gets wind of the toymaker's plot. He is slain, though not before he has warned Dr. Daniel Challis (Tom Atkins) that something evil is afoot. Together with the storekeeper's daughter Ellie Grimbridge (Stacey Nelkin), Challis investigates the mystery of the Halloween masks.

This magazine was chastised by readers for giving away the conclusion of *Tron* in our first issue. Never again; go and see the film. It's no classic, but through able filmmaking and some clever plotting opens a new genre of "computer occult" which, hopefully, will flourish. ▲



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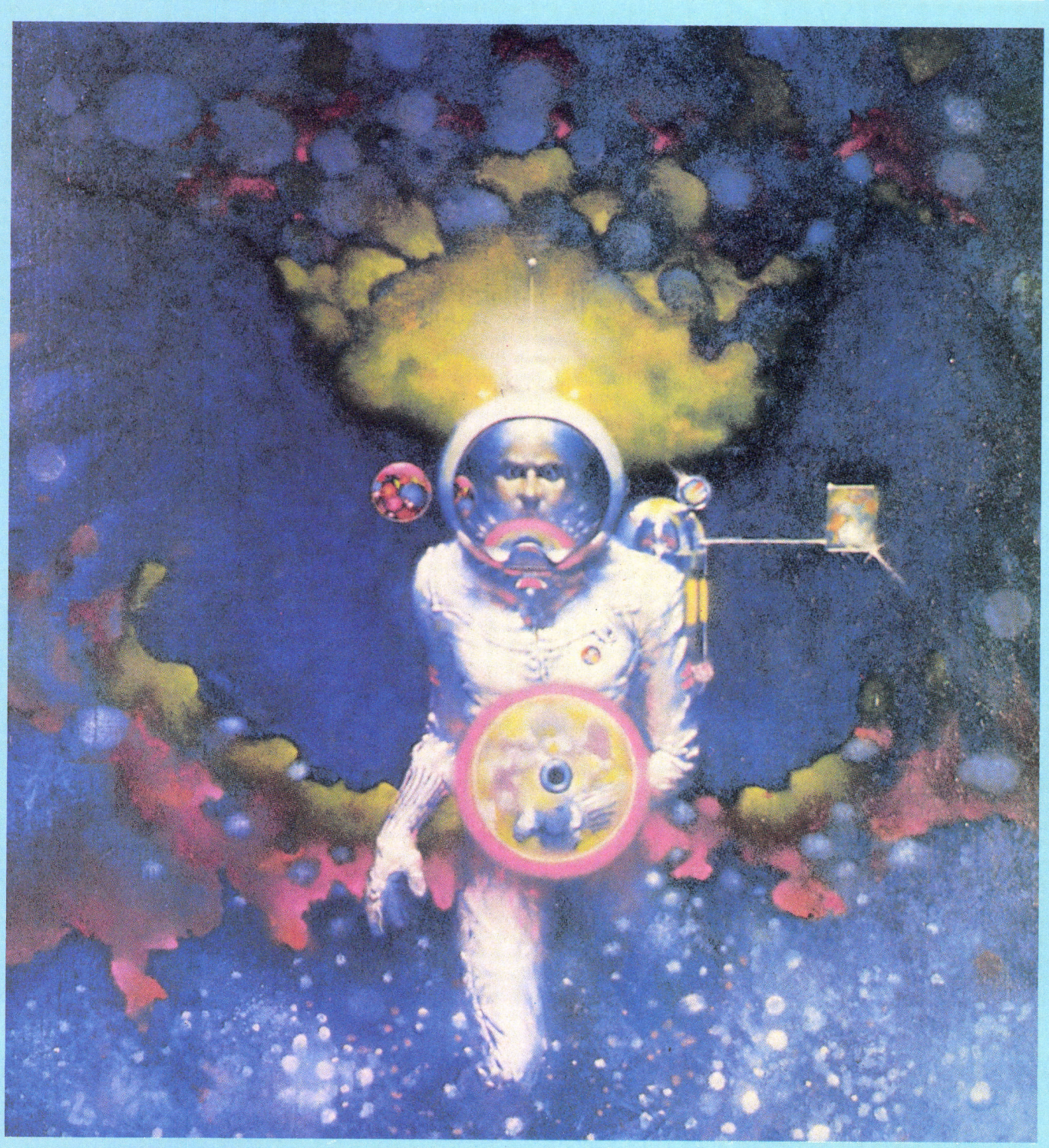


THE INCREDIBLE WIZARD

The Wizard of Wor comes to home videogaming in Astrocade's finest cartridge yet.

Object

The ancient world is plagued by demons. Some of them are only moderately annoying; some are utter miseries. Others are positively lethal.

As a "worrier," it's your task to penetrate the infamous Dungeons of Wor and rid the land of its many nefarious inhabitants. No problem, you think. After all, you've an army behind you.

As soon as you enter the catacombs, you begin to wonder why you ever volunteered for service. Your knees begin to knock, but you cherish the feeling for one reason: it means you're still alive.

Not only are the labyrinths dark and gloomy, eerie sounds creaking and howling from within, but they are so narrow that only one soldier can penetrate at a time. It is then that you learn why the king sent a full battery on this mission: your personnel perish with alarming frequency.

Your Concentrated Unified Field Disturbance Rifle is fully charged and you grip it tightly within your perspiring palms. Your radar screen is operative and you enter the dungeons yourself — the dungeons where death is less a question of "if" than a matter of when.

Your mission is to destroy as many monsters as possible, from Burwors to Garwors to Thorwors to the great Wizard himself, before your own demise.

Variations

There are three levels of play: Easy, Medium, and Hard. The monsters move with increasing rapidity as the difficulty increases. At the same time the successive mazes have fewer and fewer walls, permitting the creatures to come at you from more sides simultaneously. Fortunately, the demons can only attack vertically and horizontally, never diagonally. In the more open mazes, you will be distracted by the monsters' approach from all angles: try to pay their maneuvers no attention, for in the end the creatures can come at you only from top, bottom, left, or right.

Scoring

Burwors (blue): 10 points	Thorwors (red) 50 points
Garwors (yellow) 20 points	The Wizard 250 points

Worluk (blue with yellow wings) 100 points

Worriors (yellow or blue) 100 points

Whenever you destroy a Worluk, the point value of the next maze doubles. Sizzling the Wizard wins you a quadruple point value. When a Worluk and Wizard appear in the same maze, failing to destroy one does not affect your bonus for having eliminated the other.

Extra players are awarded every fourth maze.

Control

The Incredible Wizard is fought using Astrocade's three-function joystick, though only two of the implement's abilities are brought into play.

The joystick handle moves your worrior up, down, left, and right, while the trigger shoots your rifle. A quick jerk to one of those sides will cause your worrior to face the side without further movement in that direction. The knob atop the joystick is of no help.

Patterns

In time, you will come to recognize some of the mazes. However, individual patterns do not recur with any regularity. Nor is there any set place from which the monsters or the Wizard enter the catacombs. However, they always appear in the same order, the Burwors and Garwors first, and after a few moments the Thorwors and Worriors.

The moth-like Worluk flits your way only after all the Wizard's other familiars have been destroyed; the Wizard comes next, though not all the time and never after the first maze, but at any time thereafter.

There is one sure way to tell when the Wizard is about to appear: if your worrior can discharge more than two shots after the Worluk has been vanquished or escapes, then the Wizard is on his way. If that is the case, follow the strategies cited five paragraphs hence.

Your own worrior always begins by entering through a doorway in the bottom left of the screen, except in two-player games where the second participant gets the doorway on the lower right.

Strategies

Most of the time, you should blast a monster when you have the chance. There is little time to reflect on this: the beggers move swiftly! The sole, incontrovertible exception to shooting-on-sight is when you're gunning down a long corridor. At any time, before you can fire a second shot your first one has to have exploded. If you fire at a remote target and there's a creature around the corner, your projectile might not reach — and, hence, you may not be able to "recharge" — before the nearer monster arrives and you're disintegrated.

As a rule, in any maze try to situate yourself in the corner of a lengthy tunnel. For the most part, the longest tunnels are horizontal. Not only will that give you time to turn and fire at whatever is ambling your way along the lengthy corridor, there will by virtue of its length be more passageways leading into that tunnel, ergo more monsters will use it.

Your only concern beside firing along the tunnel will be to pay attention to what may be scampering along the short side of the right angle. The creatures of *The Incredible Wizard* are quite clever: if they see you blasting away down the corridor, one or two of them *will* try to sneak around and come at you from the side.

After you have done away with the lesser creatures, the Worluk will arrive. While the other demons in this game change directions abruptly, none makes quite so fleet an about-face as the Worluk. With a supernatural disdain for the laws of physics, it *can* make immediate, full-speed changes in its course. That means if you've been tailing the Worluk and are close behind it, you run the very real risk of being run over. At the same time, while it may very well change direction and head your way, it may stop short of you and shift gears again. The monster is nothing if mercurial.

What *is* predictable is that the Worluk will almost always try to escape via the door nearest to the spot where it first appeared. Thus, after clearing the screen of all other menaces, position yourself with a clear shot at that door. Or, if you want to try and anticipate the Worluk, try to pick off the winged beast before then. Do this not by chasing it into the maze, but by nestling at the far end of a long corridor. Moving into the more convoluted areas of the labyrinth while that devil is buzzing about will more than likely bring about your ruination.

The Wizard moves in a manner almost identical to the Worluk, but he has the added threat of firing projectiles rapidly in all directions. He will show up more and more frequently the longer you survive.

Always prepare for the Wizard's arrival by sheltering yourself on as many sides as possible: this tartar really *is* a

one-man dervish, toting a pistol as he dashes around the maze, becoming visible for mere moments, eluding your radar, and changing course unpredictably. After having determined by the process mentioned above that the Wizard is on his way, your best bet is to sit in a corner and open fire along a free side, just in case he happens to materialize there.

Don't go wandering about: he'll come to you soon enough. Nor should you vacilate; choose a direction which offers the Wizard the fewest maze walls in his approach to you, and stay facing that direction. Be prepared, however, to shift and shoot the other way if he alters his approach. Further, the Wizard is an exception to the hold-your-fire rule mentioned earlier. If you don't plug him far down a corridor, his missiles are sure to nail you.

Accordingly, even if you don't get the Wizard, make certain he doesn't get you by *never* leaving yourself out in the open when he is afoot.

Another "never-do" applies to every creature in every maze. That is, never position yourself by the right or left wall near the spot where a passage leading from one side of the screen to the other opens now and then. If your back is to the wall when the door appears, and a creature happens through it on the other side, it will trample you under before you can flee.

One of the strategies you should always undertake is to shoot clusters of monsters. You often find two, sometimes three Burwors, Garwors, and/or Thorwors moving in tandem: at such times, you can obliterate them all with one shot. If you see a cluster developing, chase it if possible. If one is already developed, chances are you won't arrive in time to tag them all. The clusters are extremely shortlived.

In the more difficult levels, especially "hard," you'll be sitting still less than in the "easy" level. For one thing, the creatures move faster; for another, they fire weapons at you. Best to stay on the move, always firing ahead of yourself to clear a path, pausing to pivot and fire at any creatures which happen to come at you from another side.

The most difficult level of all is "The Pit," which has no walls. It is simply the bare playing field, the monsters, and you. Get yourself at once to any corner of the field and play from there, shooting vertically or horizontally as demons approach. Remember, though some of the monsters will approach from what seems to be a diagonal direction, they must ultimately have at you from top, bottom, left, or right.

When it comes time to bag the Worluk, position yourself right before one of the two exits. It moves so swiftly that, unless you're a much-decorated Worrior, even a long corridor doesn't give you enough of a cushion to hit it. Unless your timing is perfect, a missile fired more than one-third of the screen away from the Worluk will arrive too late to hit it. And, as mentioned above, trying to *anticipate* the beast is difficult at best; in the "hard" level, the difficulty increases geometrically. Which is a long-winded way of saying that your best bet remains standing by one of the exits. It *must* go to one of them. You'll blast the bat-beast if it heads your way, and be in the ideal position to hit it — unless it uses the other side.

In any maze, if you want an invisible monster to show itself fire in a "false" direction from the way you want it to come. More often than not the creature will fall for the bait and attack rather than hide.

Using the radar to watch those creatures which can become invisible — all but the Burwors — is of value solely in the climactic moments of play. The maze is not indicated on the radar, only the creatures' movements within the rectangular screen.

During the thick of battle, when there are many monsters afoot, it's best to be ready to pivot and blast rather than try to anticipate. The invisible monsters materialize, literally, a second before they pounce on you. That's enough time to turn and fire.

Conversely, if your eyes are on the radar at the bottom of the screen, you may not have time to interpret its position from the sketchy information presented on the radar screen, then turn in the right direction. The radar is best for those times when there is only one Garwor or Thorwor afoot and you choose to stalk it.

Comment

The Incredible Wizard should sell a lot of Astrocade units. Not only is gameplay superb, and the graphics excellent — the Wizard's death throes are dazzling — but the sound effects are among the best of any home game. There is music which introduces each maze (if you don't appreciate the delay, cut the tune short by pressing the trigger), and the six-shooter sounds of the Wizard's weapon are worth the price of admission. ▲

Peripheral Vision
The War Over Wor

There are going to be some hot times in the marketplace, and it appears that Astrocade may well be the one taking most of the heat.

The Incredible Wizard has been on the market for several months now. Sales-wise, it has done remarkably well considering the fact that Astrocade still has to overcome several hurdles to make itself felt in the marketplace.

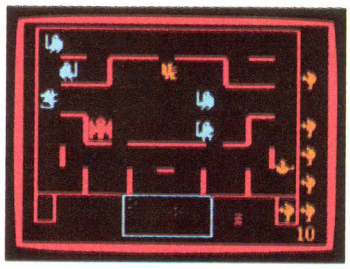
One problem is that anyone competing with Atari and Intellivision is facing a pair of juggernauts. Even monied companies like NAP, which manufactures Odyssey, have had to work hard to chip away at their lead. What with Coleco-Vision crowding the marketplace even further, Astrocade has its work cut out for it.

Another problem the company has had is a series of name changes-cum-identity crises over the past few months. They've gone from being Bally to Astrovision to Astrocade. None of which is to denigrate what is essentially a very sound game system.

Nor do Astrocade's difficulties end there. A new specter has arisen, one which attacks *The Incredible Wizard* specifically: the new CBS games unit is making ready to release the same game under its original arcade title, *The Wizard of Wor.* The CBS game will be Atari-compatible.

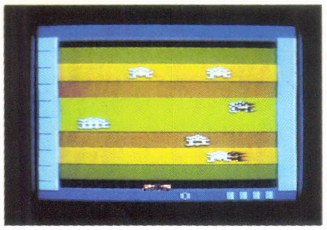
Just how Midway, which produced the arcade version, licensed the game to two companies is not clear at present, though we'll have the story for you next issue.

What's clear is that CBS, with an aggressive campaign, very slick packaging, and the benefit of being available in a format which can be used with the most popular home videogame unit of them all, might well be a greater foe than any fought by the Astrocade Wizard on the TV screen.



***A screen from Astrocade's* The Incredible Wizard.**

preview



Demons to Diamonds

One of Atari's most delightful games.

You begin the game with a gunbase which can be reborn a total of four times. Your targets are demons which shuffle overhead in horizontal paths at different levels.

The demons come in two different colors. If you shoot a demon which is the same color as your base, it turns into a scintillating diamond. If you shoot a demon which is a different color, it turns into a skull.

The skulls fire laser bullets which will destroy your base if they strike it. The diamonds flit about the screen: if you hit one with a burst of cannon fire before it reaches either wall, you win bonus points.

Skulls vanish after a while, and demons change colors when they strike the side walls.

After a wave of demons has been cleared from the screen, a new crew appears, in greater numbers and moving faster than before.

The sound effects are delicate and quite charming, the game possessing a fairy-tale quality which is a welcome change from the more bombastic shoot-em-ups.

Numerous variations, such as fast and slow "skull bullets" add to the appeal of *Demons to Diamonds.*

The Empire Strikes Back

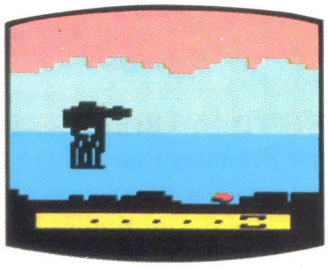
Parker Brothers' first Atari-compatible videogame has been available for three months. However, the three or four of you who may be holding out should get yourself a copy.

The Empire Strikes Back is similar to *Defender* and *Chopper Command,* but embellishes on both.

Your mission is to soar across the ice of the planet Hoth, using Snow-speeders to fell five Imperial Walkers, giant ambulatory tanks headed for your power generators. You can batter one Walker until it vaporizes after forty-eight strikes, or play hit-and-run; concentrating on one is the better tack, since you are less likely to fly into stray bombs.

The player has five Snow-speeders in all. Keeping any one of them airborne for two minutes empowers it with the Force, making it indestructible for twenty seconds.

In terms of the swift, backward/forward flight of your vessel, this game is as versatile as *Defender* and *Chopper Command.* But you can also land your ship for repairs — a difficult task in the glaciated valleys — and many players will find the challenge of hammering away at each Walker more cathartic than the single-blast destruction of the other games.



Frog Pond

Neither a fast-paced nor particularly innovative game — there are, as noted in this issue's *Eye on* section, other frog games on the market — this Atari cartridge is nonetheless not without its appeal. Gameplay is will probably please children more than adults. You've got to leap your frog, extend its tongue, and snare sundry insects which pester the pond with their presence.

Two players compete for the winged cache, bugs coming in waves of thirty beginning with dragonflies and plodding beetles. Each consecutive wave contains an additional species of insect, making for eight varieties in all.

As the game progresses, it becomes more difficult to nab the little banes. Gnats, for example, must be hit twice; wasps can stun your green proxy.

The game ends when all the bugs have been caught or have fled.

Frog Pond's greatest asset is its evocative sound effects. The croaking and soft-bellied leaping of the frogs are perfectly realized, as are the buzzing insects.

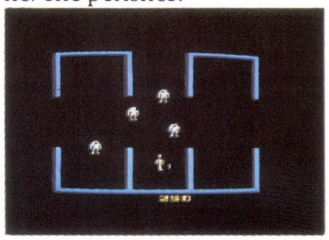
ALSO RECOMMENDED:

Mega Mania

This Activision cartridge is one of the most demanding shooting games ever devised. Each new wave of objects — household items such as bowties and hamburgers — comes at you in a different pattern. An exciting, inventive variation on a tired theme.

Berzerk

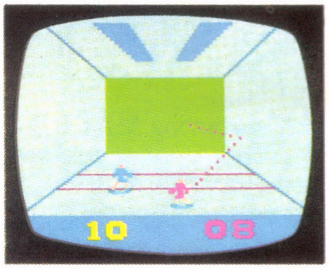
Atari's excellent rendition of the arcade game. Similar to *The Incredible Wizard* in that the player must move through maze-like rooms while blasting opponents. The pace is slower, but necessarily so: if your figure touches any of the walls, he/she perishes.



NOT RECOMMENDED:

Racquetball

An ambitious cartridge from Apollo. The major drawback is that while the view from the back wall is true to the game, the ball does not bounce realistically in perspective. One is never certain about its arc and distance from the front wall. Similarly, the ball's shadow is more distracting than effective. Aficionados will be disappointed, others simply confused. Better to spend the money on Apollo's superb *Space Cavern* and *Lost Luggage.*



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His brother's movin' on.

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conquering:

PITFALL

Help Harry hurtle his heroic heart out!

Object

Pitfall Harry is an adventurer without peer. He's also an adventurer who doesn't know the meaning of the word exhaustion. If you're game, he will run, leap, and swing through 256 different screens in search of danger and, of course, treasure — the Lost Treasure of Enarc!

Variations

There is only the one game, a continuing quest from screen to screen.

(Note: you can create your own variation by playing *Pitfall* backward; that is, begin by going left rather than right. This, of course, is cheating, but it will satisfy two needs. First, just in case you don't get that far on your own, you will get to see the screens which are 256th, 255th, 254th, etc. Second, if you're finding it difficult to get over, say, the alligators, should you fall in this version you get a new Harry on the *other* side of the swamp.)

Scoring

Harry begins his trek with 2,000 points. His tally changes swiftly once you engage the game.

The only way to win points is by snatching up treasure as you find it. This takes various forms, and accounts for different point values. For example, the diamond ring earns you 5,000 points, the bag of money 2,000, the gold ring 5,000, the bar of silver 3,000, the bar of gold bullion 3,000, and so forth.

There are plenty of ways to lose points, however. Every time you are struck by a rolling log you surrender twenty-two points *maximum*. If you jump a log — rolling or otherwise — and nick it on the way down, you lose only a handful of your total.

Falling into a pit costs you 100 points. Ironically, killing one of your three Harrys does not cost you any points.

While all of the point-scoring is being totalled by the computer, it is also keeping track of your time. The game ends after twenty minutes, though it will keep on going if you're down to zero points. The object, naturally, is to make the best time with the greatest score.

Control

Harry is maneuvered with the joystick. The action button causes him to jump; when pressed in conjunction with the stick being moved in any direction, Harry will jump in that direction. When only the stick is shifted, Harry runs either left or right.

Patterns

The treasure is always located on the right of the screen, and new Harrys replace dead ones by dropping from the trees on the left side of the screen.

Strategies

The best way to win *Pitfall* is by learning to jump. If you can master that, everything else is secondary.

If you can jump the logs, you won't lose points there.

If you can jump the alligators with precision, from head-to-head, you'll lose no Harrys in the swamp.

If you can jump the pits, you won't find yourself facing the scorpions which lurk in the subterranean passageway (unless you *choose* to go down there; see below).

If you can jump to the vines which dangle over water, quicksand, earthquakes, and other disasters, you won't fall short of the rope and perish.

If you can jump the campfires, cobras, and scorpions, you won't be burned, bitten, or stung to death.

Jumping is a matter of timing and a light touch. Don't *press* down on the action button and, that done, *push* the joystick. This will give you a lumbering, doomed Harry. Rather, flick your wrist so that the joystick is jerked over, at the same time jabbing the action button with your thumb, and then releasing.

As for specifics of play, here are some valuable pointers:

1. If, when you enter a screen, the ground is free of obstacles save for a log or two, *stop!* It will split momentarily. Wait until it closes before you dash across. Further, it's a good idea always to leap the last leg of your crossing, so that you'll be in the air should the earth crack beneath you.

2. The alligators' mouths stay open for 2.1 seconds, and shut for just as long. As it will take you a fraction of a second to leap from the swampbank to the first alligator, do so after the mouth has been open for nearly the full time. By the time you land, it will have shut. This gives you more time to cross. In any case, make it a practice to land on the head rather than mouth of the animals, since that part is always solid. If the mouth opens when you're on the alligator, it's so-long Harry.

3. In most cases, whenever there's an option to travel by vine or run across a vista, use the former. It's quicker and safer. If you miss the vine, you can always step back and wait for it to return. Having said that, if the earth is just closing up and the vine is on the opposite side of the screen, make a run for it rather than wait. Remember, you're also racing the clock!

4. Speaking of waiting for the vine, don't leap haphazardly at a tendril which is starting to swing away from you. Chances are you won't catch it but will plummet into the quicksand, crevasse, etc.

5. The logs come in ones, twos, or threes. The single logs are the easiest to jump, as you can keep running while you do so. If you try to take the trios at a run, you'll stumble over the second and probably the third. Best to stop and hop them. The doubles can be taken in one mighty leap. Needless to say, after completing one wave of logs, anticipate the one which follows. In any given screen, the number of logs will always be the same. Note that a new Harry fallen from the trees is immediately vulnerable to rolling logs.

6. If you're jumping a pit *and* logs at the same time, jump the trios before taking the pit, as you'll find it virtually impossible to negotiate four impasses; with doubles, wait until the center of the logs is over the midpoint of the pit and you'll clear both; with singles, take them as they arrive.

7. Whatever you do, try not to be knocked over by a log while crossing a vanishing obstacle. By the time you rise, the fissure or marsh will usually have returned, swallowing you up. The logs are not affected by any obstacle.

Playing the overground is a matter of timing. Playing the underground is a question of nerve. For one thing, the scorpions are difficult to leap. Their coiled stingers makes them a tall target. Best to jump as close to the arachnid as possible, even later than your instincts dictate.

You will lose one hundred points for descending to the underground, but there is often good reason to do so: you can *save* a good deal of time. For each underground screen you negotiate, that's *three* above-ground panels you don't have to cross. The only drawback apart from the scorpions is if you encounter a brick wall between tunnels. At these blockades, you have no option but to turn around. Otherwise, go as far as you want until there's a ladder to ascend.

Another negative aspect of subterranean travel is if there's treasure above. You won't be able to get it except by using the next available ladder and backtracking. Not terribly efficient. In all: stay on rather than in the earth.

Comment

This Activision game is full of surprises. Not only has it packed a staggering amount of danger and therefore player-challenge into an Atari-compatible format, it offers several *pleasant* surprises — such as Harry's Tarzan-like yell as he swings on his vine.

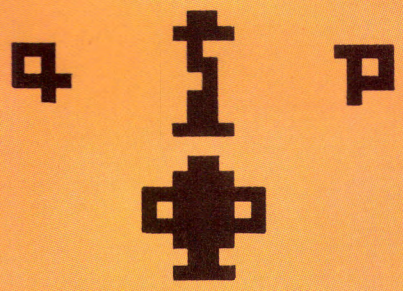
conquering:

HAUNTED HOUSE

How to spook the world's eeriest videogame.

Object

A century ago, a recluse named Zachary Graves dwelt in an old four-story mansion. When he died, the house was condemned and shut down.



A magic urn remains in the mansion, and though it was shattered in the infamous earthquake of 1890, its full potency can be restored ... if anyone is bold enough to enter the mansion and collect the pieces.

The twenty-four room mansion is allegedly haunted. Still, you want to be a magician so you enter the place. Within are several artifacts to help you in your search: a master key, a scepter which protects the wielder from evil spirits, and a box of matches.

You'll need these items: in addition to the spectre of old man Graves, you've been told that there are tarantulas and vampire bats prowling the creaking corridors.

Variations

There are nine versions of the basic quest theme, each of which incorporates the elements of the game before it: 1. lighted walls and unlocked doors; 2. no lighted walls; 3. doors are all locked but the master key is plainly in view; 4. doors locked, the master key well-hidden; 5. extra tarantulas; 6. the creatures are more versatile; 7. the bat can steal your objects; 8. the creatures move faster; 9. the floor plan keeps changing.

The difficulty switch can be disengaged to throw lightning through the windows, helping you find your way around.

Scoring

The player begins with nine lives. The score changes based on the number of lives you lose and the number of matches you are forced in your terror to ignite. Being "scared to death" (touched by a creature or ghost) costs you a life.

Control

Haunted House is a joystick game. The joystick moves your figure around the room. Pressing the action button allows you to light a match. You pick up an object by touching it. You drop it by touching another object.

Patterns

The floor plan is the same in eight of the nine games, and in the easier levels the master key is always in the same place.

You *must* have a match lit in order to see *or* retrieve an object, and a match must be lit for the urn to reassemble, which it will do automatically once you have all the pieces. Since you cannot carry more than one piece — or one of *anything* — at a time, you must be certain to leave these in a secure place.

Strategies

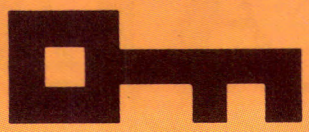
Any spot of your choosing is "secure." Later games permit the bat to steal whatever you're holding, but at least the cache is safe. It's most sensible, if not always convenient, to deposit objects by the front door of the mansion, where they must be brought for the game to end (and some wonderful *Twilight Zone* music to be played).

Since this is not a timed game, there is no need to rush through the mansion. Explore each floor thoroughly.

When you encounter an urn fragment, grab it. Bring it to any other parts you may have collected and they will join.

With the exception of an urn part, the most important artifact is the scepter. In later levels you'll be forced to *crawl* along, since the beasties move swiftly and mercilessly; speeding through the rooms without the scepter, you'll collide and perish in instants. With the scepter, you're safe from all but the charm-proof ghost.

The safest if least exciting game is to find the scepter, travel through the house noting where the urn parts are hidden, then returning and grabbing them, racing to daylight with the reassembled object. Thrill-seekers may not desire so methodical an approach.



The master key is useful, but not hugely so. In the more difficult games, locked doors bar you easy access to rooms. However, *any* room can be reached using staircases. For example, if you're on the second floor and want to get to a barred room on the other side, circumnavigate the door by descending or ascending, crossing a hallway on the other level, and climbing an opposite staircase.

The key is not worth having at the cost of the scepter, since the creatures can pass through locked doors. In this case, magic is more useful than flight.

Since you lose points for lighting matches, don't relight an extinguished match in a room already determined to be empty. The appearance of the ghost or vermin will cause the match to go out; no sense wasting it if you don't need it. The exception is any game in which the bat has stolen an object, which alas may have been deposited in a place you've already explored.

In later levels, keep in mind a few cardinal rules:

1. On any given floor, keep track of the locked doors. If trying to outrun a creature, you don't want to lunge into a room from which there's no escape!

2. Similarly, always know where the stairs are. Even if you're forced to backtrack, they are a real help when you're beset by two or three foes at once. Though the ghouls can use them as well as you, not *all* are likely to do so.

3. In new terrain, don't make the mistake of heading for a handy corridor when an attacker appears. There may be an invisible locked door. If you don't have the key, go the way you came.

4. If, in your flight, you happen to find the scepter, remember: you can't pick it up without a match being lit, and you can't light a match as long as a creature is in the room with you. You must lead your adversary to another room and elude it long enough to grab the amulet.

Comment

This Atari game is one of the few cartridges which forces players to make thoughtful choices. It is the first "horror" game, and while the cartoon-like graphics only suggest menace, the sound effects are quite moody. The thunderclaps are particularly impressive, especially if the game is played in tandem with your stereo amplifier (see our first issue for details on making the hook-up).

An atmospheric variation on the quest theme used in *Adventure, Haunted House* proves that Atari need not license to produce appealing and original games. ▲

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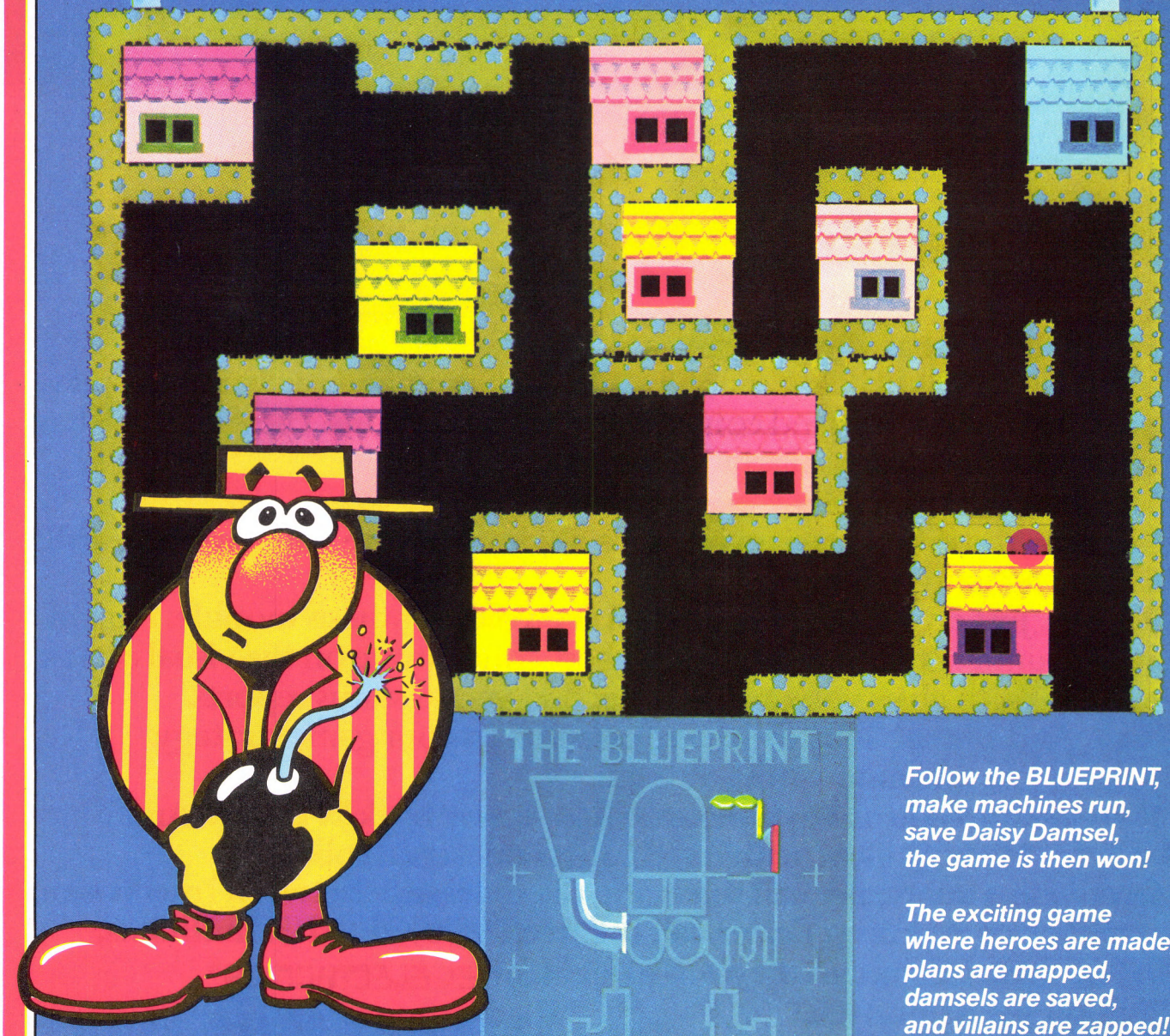
A-MAZE-ING

Bally/MIDWAY T.M.

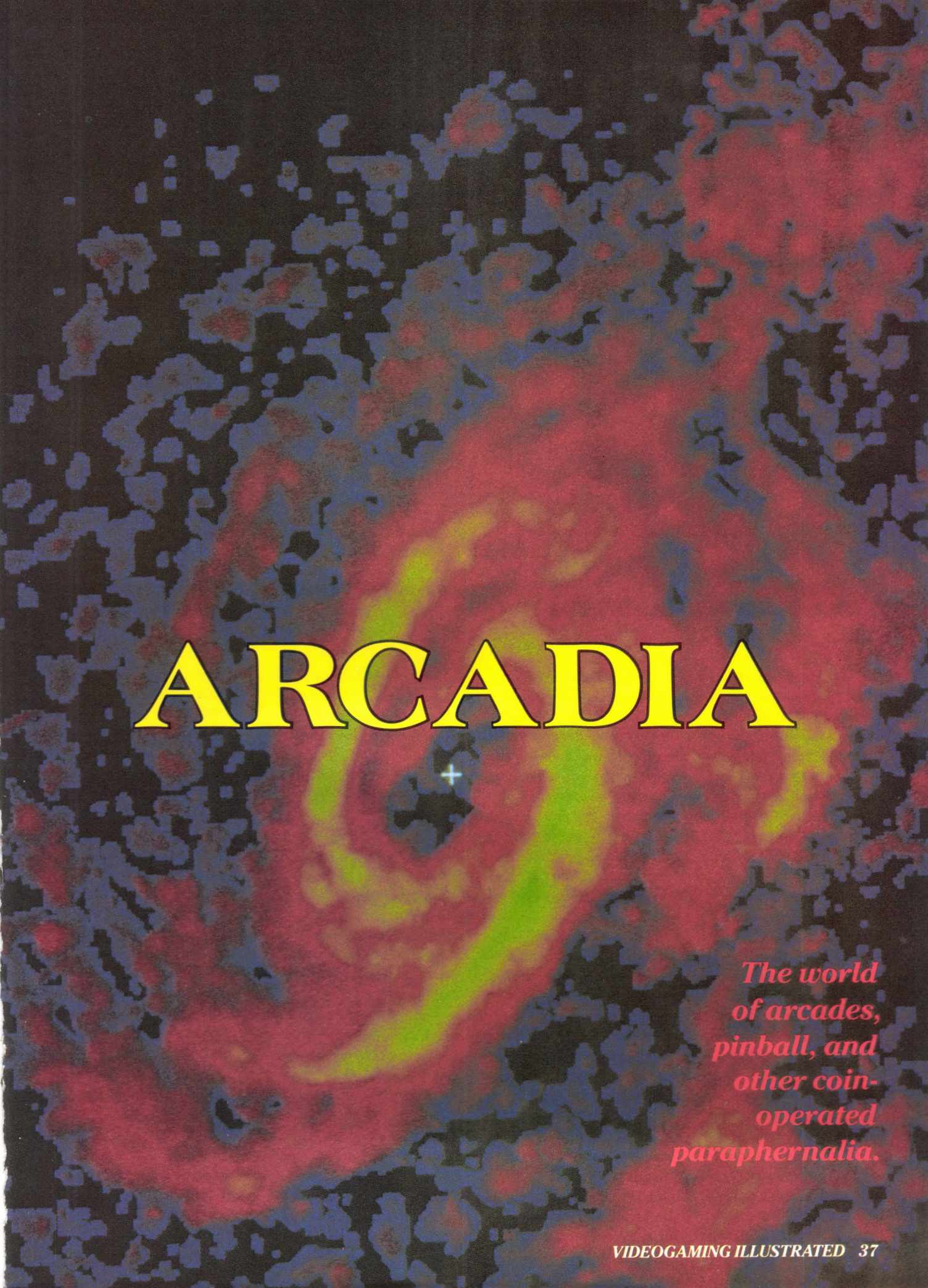
blueprint

...THE MOST CONSTRUCTIVE GAME EVER PLANNED!



Follow the BLUEPRINT, make machines run, save Daisy Damsel, the game is then won!

The exciting game where heroes are made, plans are mapped, damsels are saved, and villains are zapped!



ARCADIA

The world of arcades, pinball, and other coin-operated paraphernalia.

THE EXIDY EXPERIMENT

Portrait of a Feisty and Futuristic Independent

by Richard Meyers

In a business world dominated by conglomerates, the existence of a small independent is unusual. But when that independent happens to be one of the prime movers in its industry, there has to be something special about it.

This is true of Exidy Inc. And the producers of *Pepper II, Mouse Trap, Venture,* and other games are working as hard as they can to *stay* small.

"We are a privately held company," says President Pete Kauffman, "and with good reason. Sales and expansion are nice to have, but to give up control and flexibility isn't worth it. We can have more fun making games *our* way than we could otherwise. As long as we keep our internal controls, we'll get only as big as we have to."

Director of Market Analysis Arlen Grainger quietly agrees. "Not only are we small, we're the only small company that does its own research and development. We don't go to Japan for licenses or new products, we rely on in-house talent." Grainger adds, "Our small size also makes it possible to respond immediately to changes in the market, right down to making modifications or advancements on models we're about to ship. The fact that we've been around for eleven years is attributable to our ability to capture the vital, inventive people required to keep a small operation alive."

Exidy has had remarkable success capturing a vital percentage of arcade players as well. They did this, in the beginning, with innovative games like *Video Pinball, Robot Bowl, Circus,* and *Tailgunner 2.* However, their biggest success of the early years was with the controversial *Death Race,* a followup to their *Destruction Derby* romp.

The object of both games was to run things over with your video car. In *Death Race,* the quarry was people.

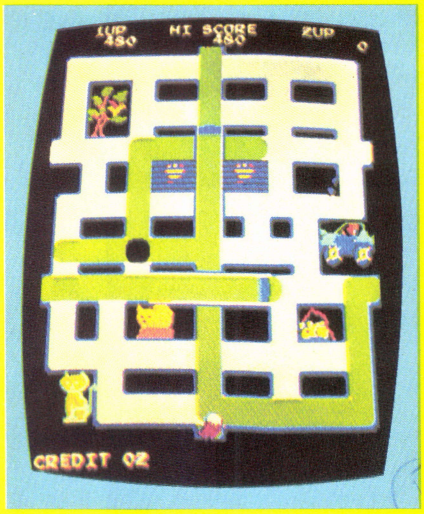
"It sold a lot of units because of the controversy," Grainger recalls, "but we all thought it was kind of laughable. It was so cartoony we never thought anyone would take it seriously."

Exidy took pains to refer to the figures as "Gremlins," but the dark humor came through in gameplay where, when the player mowed down a pedestrian, it would change into a cross-marked grave. Gremlin or not, *Death Race* remains the Rabelais of videogaming. Luckily for Exidy's corporate image, *Death Race* wasn't the only high point of their early history. *Star Fire* was one of the first space war games, as well as one of the first sit-down units. More recently the company produced *Targ,* a novel grid-race game in which players try to outrun ominous Spectar rammobiles, and the treasure hunt *Venture.* All of these games offered players something new in gameplay or hardware, reflecting Kauffman's bias toward innovation. His ambitions for the field are evident in the choice of a name for his company: EXcellence In DYnamics.

"It's easy to say that you're going to make the

finest games in the field," he admits, "but we've been able to pursue that goal. I think the best way to do that is by establishing the right working conditions for our staff. We challenge our people, of course. But apart from our employees enjoying the work itself, one of the things we do is hold in-house contests to brainstorm new games. There are cash rewards for creators, money which is often greater than an employee's salary.

"Another program we have is to set aside 'X' number of dollars per game, money which goes into a profit sharing plan to be divided up among the employees." He notes with great satisfaction, "That's one reason we've got people who come to work in the morning and stay until midnight. It's the reason a small company like ours can get a lot done in a short period of time."



One of the more recent Exidy games,* Crush Roller. *Your task is to paint the streets of the little town while a pair of mischief-makers follow you and try to knock over your paint can. Shades of* Death Race: *you, in turn, try to crush them with your rollers. At the same time, a cat, bird, mouse, runaway tire, and invisible man work hard to leave tracks on your fresh coat.

The legend of* Venture *warns, "In a Dungeon of Olde there are Treasures to Gain in Chambers midst Creatures of Doom. Pass Quickly through Halls where Green Monsters do Reign; your arrows Pierce Only in rooms." In short, there are goblins guarding gold, spiders holding a damsel captive, moving walls which conceal a diamond, and other hazards keeping you from the thirty-six different treasures.

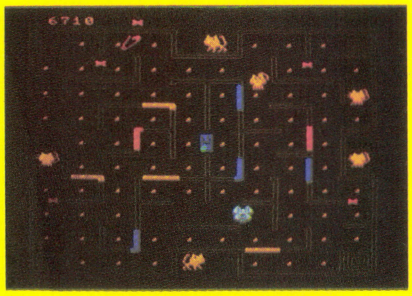
Because the company is preoccupied with trailblazing, one is initially surprised to find their much-ballyhooed *Pepper 2* something of a *Pac-Man* variation. There is, however, a good reason for the similiarity. Grainger, who was one of the originators of the attraction, walks us through a game.

"Let's begin by noting that it's different from any other game in that you play on the maze rather than inside the walls," he explains. "As your character, a little fellow with a halo, passes over the path, it's zipped up. If you cross any section you've already traversed, you unzip it. All the while, there are 'Evil Eyes' and a 'Whipper Snapper' chasing you and unzipping your handiwork.

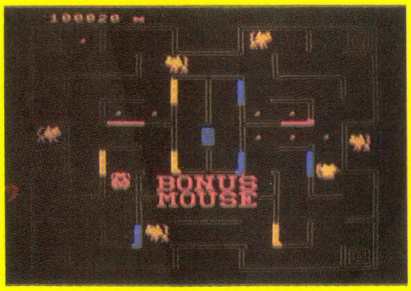
"Then there's the aggressor mode," Grainger continues. "There are territories marked by a pitchfork with a halo around it. If you reach them, you enter an energized state. Your own halo is replaced by horns and the hunted becomes the hunter."

Grainger defends the superficial resemblance to *Pac-Man* by stating that, "Videogames are a technological extension of the human. By responding to what colors, sights, patterns, and sounds affect players, we can begin to make games that will, in essence, *force* people to have fun. Where we adapt some of those qualities, it's only to expand upon them in our own games." He laughs in response to a query about this process being akin to mind control. "No," he assures *Videogaming Illustrated,* "it's all part of a very complicated theory of learning, one which involves sensory input as the key to making one's body and mind work in unison."

Kauffman elaborates. "All good games have some sort of biofeedback. We simply shape that, and in the projects we're preparing for the future you won't find anything resembling a 'me too' game."



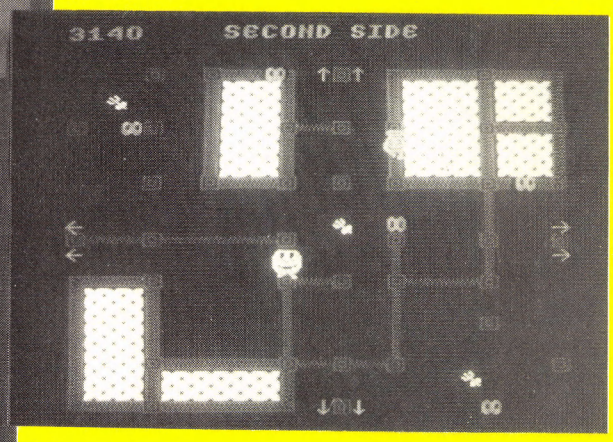
The screens of* Mouse Trap, *before and after you've run the course gathering up pieces of cheese and other items strewn about.

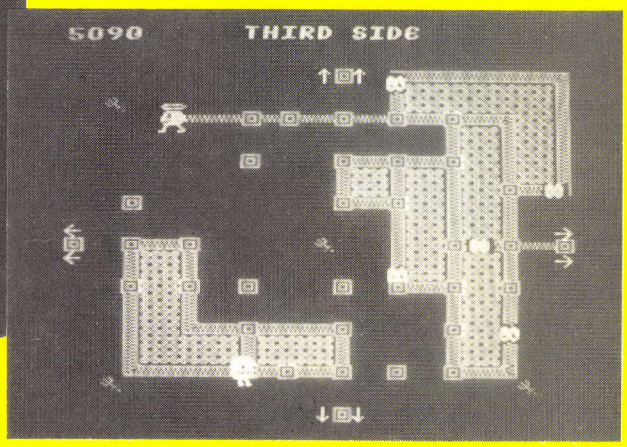


The clever, rebus-like directions for* Mouse Trap. *What you are being told: the mouse eats cheese, bone, safety pin; the dog (which the mouse becomes via a "dog button") eats the cat, cheese, bone, and safety pin; the cat eats the mouse; the purple hawk eats the mouse and the dog; the secret passage hides the mouse and confuses the hawk; and the bone — in conjunction with the dog button — turns the mouse into a dog.

In terms of the future, Kauffman sees the industry headed in several fascinating directions. "It's going to remain a fairly large industry, though I see it going through a leveling-out period. So many people jumped in, unprepared, and they're dying out now. Looking ahead a few years solely in terms of technology, there might be electromechanical, 3-D, or more interactive games in the future — in other words, hardware to support the fresh and original ideas which the best of the companies will continue to produce."

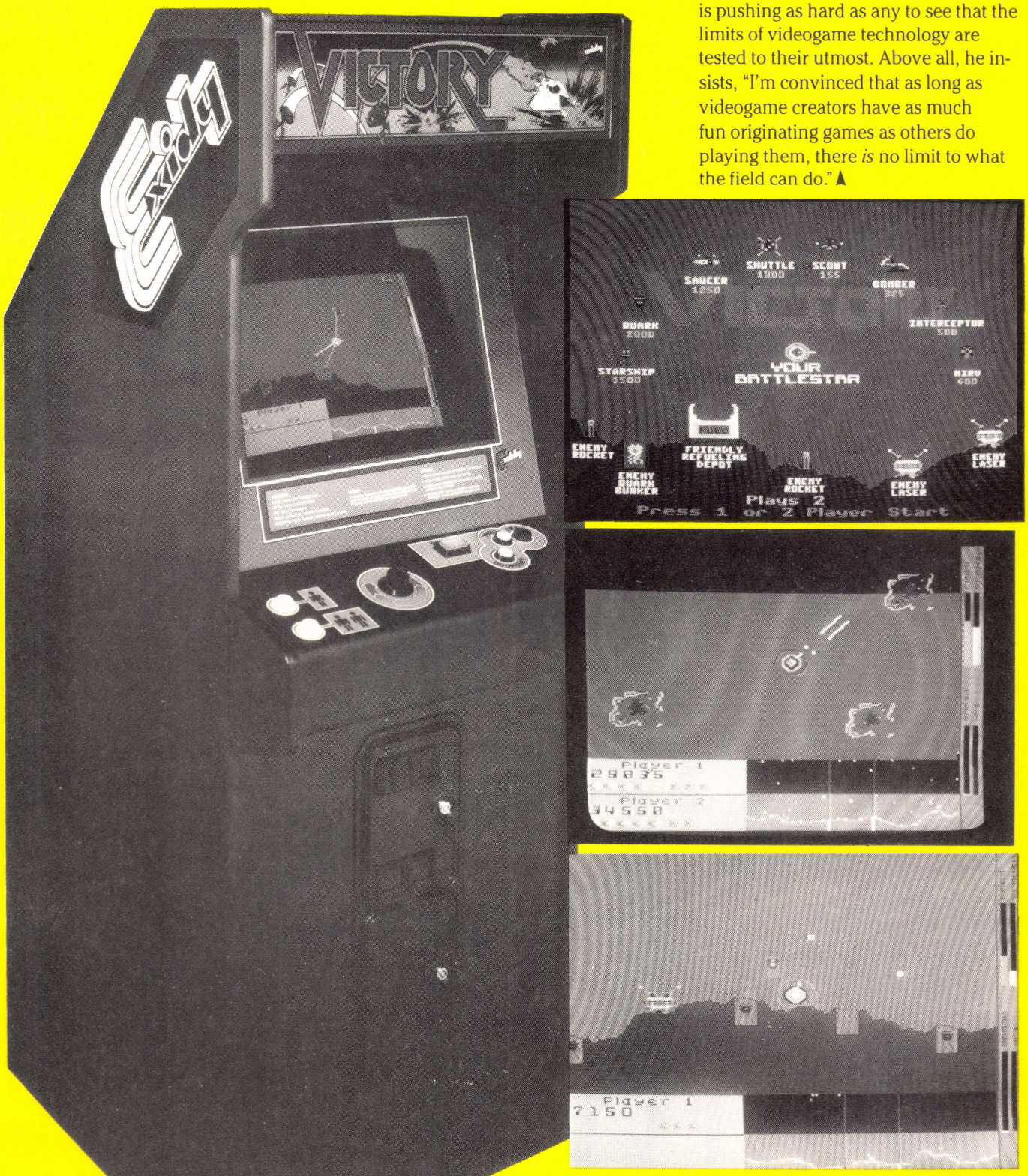
"What an arcade game will be," Grainger asserts, "is like dropping into your favorite cartoon. You'll be able to participate more fully and feel more acutely any and all effort, achievement, and reward. It's going to be an extraordinary experience."





Two of the **Pepper II** *game screens.*

Exidy's headquarters in California may be surrounded by the over four-dozen buildings which house Atari's operation, but Kauffman's small company is pushing as hard as any to see that the limits of videogame technology are tested to their utmost. Above all, he insists, "I'm convinced that as long as videogame creators have as much fun originating games as others do playing them, there *is* no limit to what the field can do." ▲



***The* Victory *attract mode.* Victory *has been popular for some time now, and to give the game new life, Exidy is offering arcade operators the chance to transform it to* Victory Banana, *a new space game. The modification kit is similar to the one used to transform* Venture *games into* Pepper 2.**

conquering:

ROBOTRON: 2084

The survival of humankind depends upon how far you can stretch your quarter.

by Randy Palmer

When Williams Electronics first unveiled *Robotron*, it did so with a press release which made the following announcement:

"It has all come down to this. The last chance for civilization as we know it. The last gasp of humanity. We have gone too far. There is no way back.

"Our technological sophistication and quest for a better world has led us to perfect the ultimate robot. A species of robot that can think and act for itself. A species that no longer needs its creator. The robots have organized and revolted. They have turned against their masters, their makers, and the whole human race is threatened. Their mission is simple: to reprogram the remaining few hundred humans into their own image or, failing this, to wipe any trace of humanity from the face of the earth.

"You alone, through a malfunction in genetic engineering, cannot be re-programmed into one of them. You alone have the unique powers of the optic shield to prevent the final destruction of humankind."

The year is 2084, and a science fiction nightmare is truly upon us!

The player, represented by a Supermanoid, must protect survivors in the image of Mommy, Daddy, and Mikey. This is done by firing lethal bullets in eight directions via manipulation of the game's right-hand joystick, and by moving in those same eight directions using the lefthand joystick.

These are the only two controls at the player's disposal, though complete and competent control ensures total maneuverability. Players must get used to shooting on the run, especially firing

in the direction from which you are fleeing. With practice, escape from and simultaneous fire at Robots becomes second nature.

Unlike *Berserk* or other games of its hit-and-run ilk, the player's figure doesn't have to stop moving to shoot. Nor does it have to physically point in the direction it wants to fire. The player handles this simply by shifting the joystick.

Five different Robots populate the game: Grunts, Indestructible Hulks, Enforcers, Brains, and Tanks. There are also Electrodes, small geometrical blocks which must be circled or shot; when a Supermanoid bumps an Electrode, both vaporize. Electrodes become more numerous in succeeding waves.

There are also Spheroids and Cuboids, deadly breeders of the Enforcers and Tanks; there are Cruise Missiles dispatched by the Brains; and finally there are Progs, humans which have been dehumanized by Brains.

Points are awarded as follows:

Sparks: 25 points
Tank Shell: 50 points
Cruise Missile: 75 points
Prog: 100 points
Grunt: 100 points
Enforcer: 200 points
Tank: 300 points
Brain: 500 points
Spheroid: 1,000 points
Cuboid: 1,000 points

An extra Supermanoid is awarded to the player for each twenty or twenty-five thousand points tallied during play, depending upon how the operator has set the game.

Although there are only three humans identified to the player, many more than three will appear onscreen after Wave Three. The player saves humans simply by walking across them.

For the first human saved, the player is awarded 1,000 points. The second salvation is worth 2,000 points and so on to a maximum of 5,000 points for the fifth and all subsequent rescues.

Each new wave or the loss of one of your Supermanoids returns the award for rescuing humans to 1,000, from which you must work back up to 5,000.

If you accidentally shoot a human when aiming at a Robot, don't worry: the laser bullet will pass through your unintended victim without harming it. Hopefully, it will press on and destroy the Robot.

Many times you'll find humans walking alongside the walls of the screen. Don't worry about walking into a wall when you try to rescue them or dodge an adversary: the walls are among the few things in *Robotron 2084* which aren't electrified.

If you watch closely when each wave begins, you can spot where your humans are about to locate. Each individual figure on the screen materializes rather than just "popping on."

Humans appear a split-second before the Robots; if you've a sharp eye, you'll be able to note the direction in which to move before combat commences.

Immediately after the Robots appear, the player's Supermanoid will emerge from the aftermath of a colorful implosion of lines and sparks. Regardless of the wave, the Supermanoid will always accrete in the center of the screen.

The basic strategy to pursue for the early waves (One through Five) is to keep moving away from clusters of enemies while shooting toward them. In later waves (Six and up) it's usually better to stand still, fire into the crowd of Robots to clear a path, *then* move. This is especially true when Cuboids and Tanks appear in Wave Seven.

The least threatening villains in the game are the Grunts. They have no weapons of their own, but the immensity of their force — which increases with each succeeding wave — is something which causes even *Robotron* masters to quiver.

Grunts waste no time pursuing the player's Supermanoid up, down, and around the screen. Their mission is, of course, to dispose of you as quickly and efficiently as possible which they do simply by walking into you. However, they are easily deactivated by a lone blast from your Anti-Robot Laser Gun. Of course, while it only takes one shot the sheer number of Grunts which inhabit the world of *Robotron* forces you to fire rapidly, in many directions and without pause.

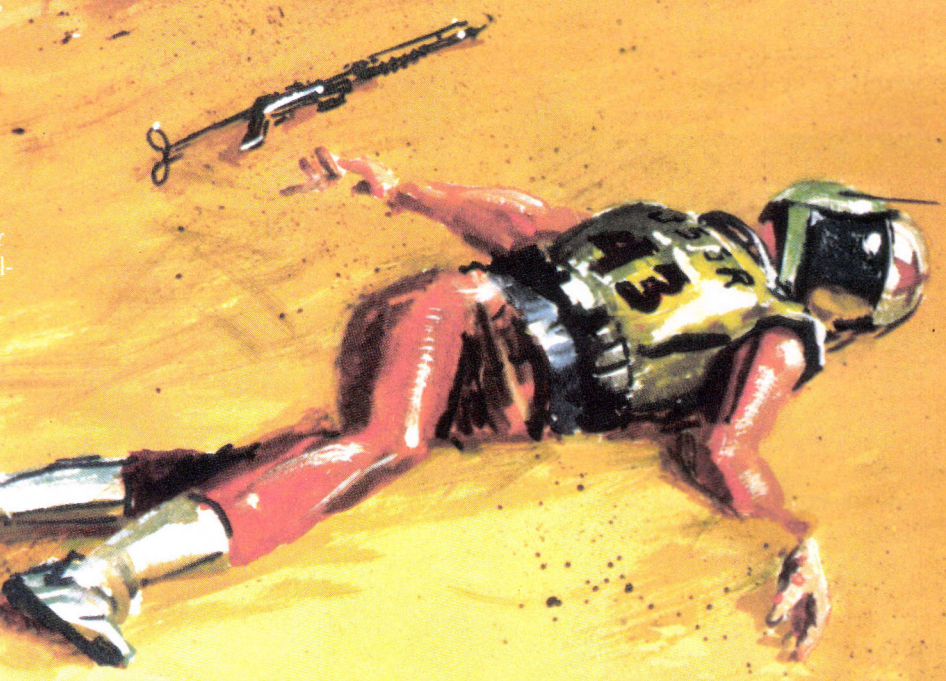
Grunts are also annihilated by Electrodes.

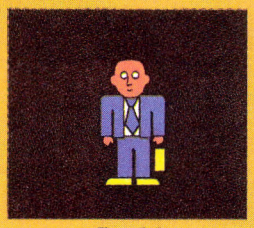
Avoid getting trapped in the corners. Surrounding hordes of Grunts will move in; the closer they come, the less time you will have to reposition and fire.

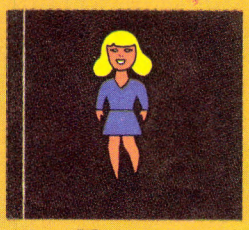
Since Grunts are the least menacing of the Robots, get rid of other foes first unless you are on the verge of being corner-trapped or overwhelmed. In any case, remember to allow at least one Grunt to remain alive whenever there are humans left in a wave. Doing in the final Grunt will clear the screen and advance the next wave. Letting the Robot live will give you the opportunity to pick up points for saving humans.

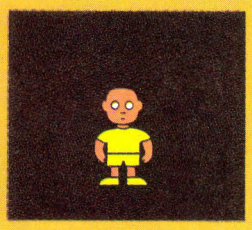
Occasionally, the player will have to sacrifice such points; for example, if most of the Grunts have been destroyed but Enforcers are being bred by Spheroids at an alarming rate. Supermanoid survival is best served by sacrificing remaining humans and leaving the wave behind.

The Hulk Robots are slightly more




Daddy


Mommy


Mikey

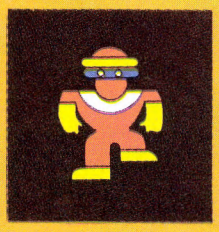
intimidating than the Grunts. They are slow but don't vanish or explode when they're shot; as advertised, they're "indestructible." Your laser bullets will merely move them back a step.

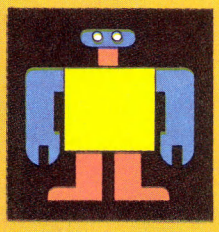
Since Hulks are constantly, mindlessly walking forward, hitting these Robots repeatedly will simply cause it to stay in the same place. Although there are no points awarded for holding a Hulk at bay, doing so prevents them from destroying humans, which they do by crossing their path — a skull-and-crossbones appearing where the mortals perished.

To save a human from an approaching Hulk, face the enemy head-on, deterring it with rapid fire while you move in to snatch up the person.

The Enforcers are considerably more dangerous. They are bred at an alarming rate by floating, pulsating Spheroids (see below), heading directly for the Supermanoid and emitting showers of "pinwheel bombs." These discharges can be destroyed by a laser bullet, though they bestow no points and are quite difficult to hit.

Enforcers are swift and crafty creatures, and though they are vulnerable to your laser fire a half-dozen may appear at one time. Thus, it's sometimes impos-


Grunt


The Indestructible Hulk

sible to put them all away. In addition, the Hulks have a tendency to get in front of Enforcers, thereby protecting them from your bullets. Best to maintain your fire against the Hulks and, when an Enforcer tries to get around, plug it. Needless to say, the nagging pinwheel bombs pass right through the Hulks, other Robots, and Electrodes.

Many times an Enforcer will sneak away from the main group, speeding to the side or corner of the screen to hide, hoping that in the heat of combat the player will forget about it. Then, when the player has destroyed the Enforcers in the main group, the corner dweller will hurl a pinwheel. Keep the beggars together by picking off strays at once.

The best way to avoid dealing with Enforcers at all is to destroy the holes from which they climb — that is, the

Spheroid

Enforcer

Spheroids. The pulsating, fiery-orange nemeses appear at the beginning of a wave, materializing anywhere on the screen and rapidly floating to the corners. If you can blast them as they go by, so much the better. But watch out: they travel perilously close to the center of the screen, where your Supermanoid will be perched at the beginning of each wave.

The player should move at once in a direction which will allow the saving of as many humans as quickly as possible. That tack gets you out of the center and keeps victims from the Robots; it should be abandoned the instant the Spheroids appear. Dispatch them as quickly as possible, before they can generate many Enforcers. It takes two, sometimes three shots to do in a Spheroid.

Never leave Spheroids until last. If you do, they are sure to *out*last you!

In Wave Five and multiples thereof, the hideous Brains make their presence known. In each Brain Wave there are no Hulks but more humans to save, thus helping the player to gather points. On the other hand, Brains can turn humans into deadly Progs (more on those poor souls later) unless the player's Supermanoid manages to save them all. That's extremely difficult for pros, let alone novices, since the humans will be spread all over the screen. Nonetheless, you should give it a go; here's how.

Fire at Brains as you move around picking up humans. There will be a sprinkling of Grunts and Spheroids/Enforcers to deal with, and you should blast them as possible.

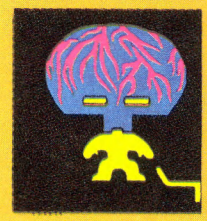
Brains emit Cruise Missiles to track the player's movements. These worm-like energy beams slink and slide all over the place and will strike your Supermanoid without warning. Make it a practice of moving and avoiding them if higher-point targets are available; if not, wipe them from sight. If there are several in your vicinity, destroying them obviously takes top priority.

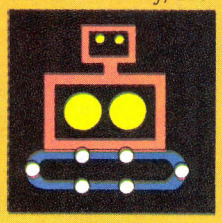
The Brains themselves attack humans, turning them into ghost-like Progs. Progs travel in vertical and horizontal paths and, like the Cruise Missiles, don't automatically head for the Supermanoid. Instead, they move around the screen in various obstructive patterns.

Progs and Brains are both easily dispatched with a laser blast.

Again, try to gun down the Spheroids early during Brain Waves, before you are forced to deal with a newly-hatched batch of Enforcers.

With the start of Wave Seven, *Robotron* introduces a new enemy, the


Brain


Tank

formidable Tanks. These are offspring of the fast-moving, difficult-to-see Cuboids. Tanks are to Cuboids what Enforcers are to Spheroids. Because Tanks are pumped from Cuboids much faster than Enforcers from Spheroids, it's important to obliterate as many Cuboids as possible and as quickly as possible. What's difficult about bringing this off, however, is that the Cuboids shrink and lose luminance as they move about the screen. Obviously, hitting them can become an exercise in futility.

It's best, therefore, to shoot in all eight directions at once. The odds are you'll hit a goodly amount. This strategy actually works better than aiming, since you can get the shots off more quickly and strike the objects before they dwindle. Naturally, the fewer Cuboids there

Continued on page 63

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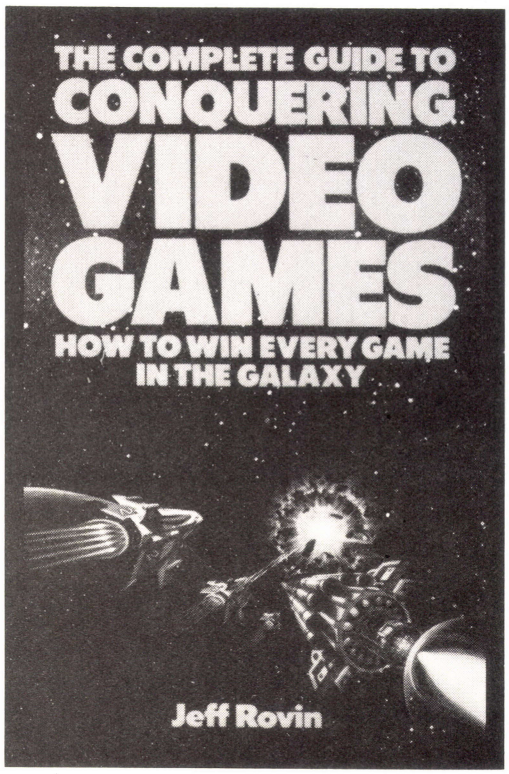

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MACMILLAN

conquering:

How to survive the most realistic space game of them all.

by Randy Palmer

State-of-the-art computer technology provides videogamers with new, vivid graphics in *Zaxxon*, the incredible 3-D space game.

The player's ship is seen from a vantage point slightly to one side and above the craft itself. Using only an outsized joystick — which is equipped with a missile-firing trigger that we suggest you ignore; see below — the player must attempt to maneuver the ship up, down, left, right, across, and through an enemy landscape. This is not your harsh but tame Apollo VIII vista, but one brimming with futuristic cannons, aircraft, and stone walls topped by electrical forcefields. Surviving that, the player must soar through space itself, where any aircraft not destroyed at ground level will pursue your ship. Then it's back to the airstrip where battle commences against a giant robot.

The joystick moves the pilot's ship left and right as well as up and down. To ascend, pull back; to descend, push forward. It's best to think of the joystick as gliding in "arcs" rather than in two-dimensional movements, since you're playing in a spatial setting. The quicker you realize that your *Zaxxon* ship is flying rather than simply dodging, the better you'll do.

Assume that the joystick describes a circle. The top half or "forward arc" is used to move the ship left and right close to the ground, while the "rear arc" shifts you from side to side high in the air. Leaving the stick in a central position will fly you at a constant, medium altitude.

Always remember that the joystick in this videogame requires a light, deft touch — not sudden and jerky movements such as those used in *Pac-Man* and similar joystick games.

The trigger on the stick can be used to fire missiles. However, it is best to ignore it and use, instead, the left or right "fire buttons" on the control panel. They perform the same function but can be pressed at a faster rate. Obviously, it's better to have more than fewer projectiles headed the enemy's way!

Flight in *Zaxxon* can be gauged by three factors:

1. The altimeter on the extreme left of the videoscreen. This isn't much help because you should be too busy following the action to glance over.

2. The shadow your ship throws on the terrain of the enemy fortress. This shrinks as you rise, an accurate indicator of how high or low you're flying. Obviously, the shadow is useless while you're jetting through space.

3. Using your missiles as yardsticks. They're being fired straight ahead: where they strike tells you your altitude exactly.

Remaining in flight is slightly more difficult than determining your height.

One everpresent problem is fuel. You run out of it rather quickly, and the only way to replenish is by raiding the storage tanks of your opponent. Do this by blasting the large red containers — taking care not to collide with them. Though these are sizeable targets, they are low to the ground and the ship will have to fly in quite low over the Fortress. An even greater danger is getting caught in the blast; make certain you pull up before the concussion hits.

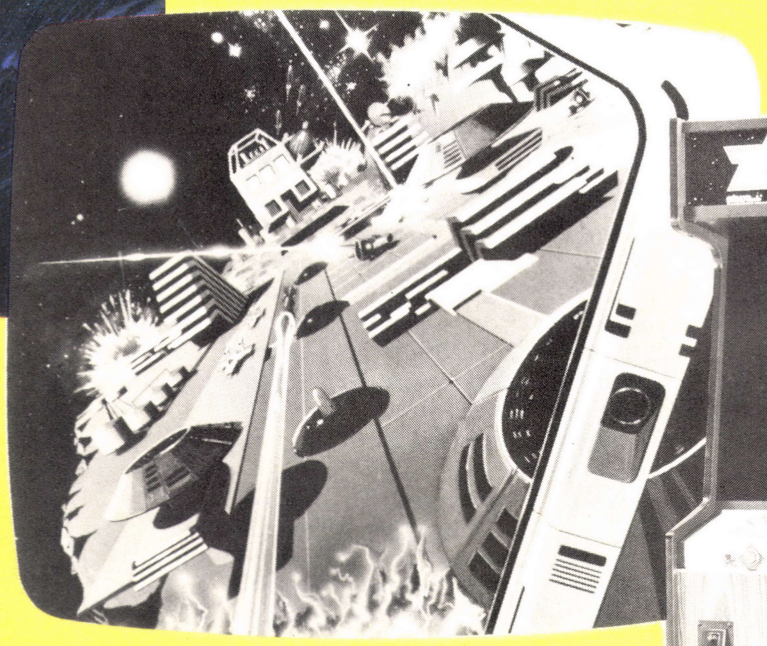
Blasting a half-dozen fuel drums will ensure enough energy to propel your ship through the relatively brief jaunt into space. Should you begin to run short, the computer will sound a warning; assuming that you survive the space battle, make the oil depots your first targets upon reencountering the flying Fortress. But — we get ahead of ourselves.

Zaxxon begins by sending your ship toward the enemy Fortress. A few orientational taps on the fire button will show you exactly where the ship is headed. If the missiles explode on the wall, move the joystick so that they pass through the gap. This will ensure that you do the same.

Watching your shadow, descend immediately after it has cleared the wall and start firing by tapping the button repeatedly. (Holding it down will get off only one shot; there's no "rapid-fire" mode in *Zaxxon.)*

The green Turrets pointing across the Fortress won't fire during round one, although they will have a go at you in succeeding rounds.

Shoot continuously while you navigate. It's advantageous to do away with as many enemy aircraft as possible, since the number destroyed means that many *less* you'll have to confront during the space battle stage of the game. You



A pilot's-eye view of the assault on the Fortress. A sequence from Sega/Gremlin's extraordinary Zaxxon TV commercial, complete with computer-generated graphics (see Videogaming Illustrated #1 for an explanation of this animation process).

Two versions of Zaxxon: the standup and cocktail table varieties. The joystick of the latter does not have a built-in trigger.

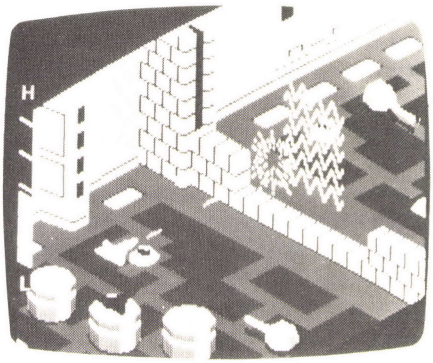
will increase your score for each ship downed as well. Only when you get the hang of the game should you defer shooting at enemy Shuttles for the high-point but non-lethal radar towers.

Zaxxon's manufacturer, Sega/Gremlin, suggests in their "Combat Ace" cards which are distributed to arcade operators, that it's a good idea to fly at a constant level. This simply isn't so in the Fortress screen. The only benefit to be derived is from flying low, when the enemy won't fire Homing Missiles your way. But there are collisions to even the score. In all, constantly ascending and diving or swerving is your best tack.

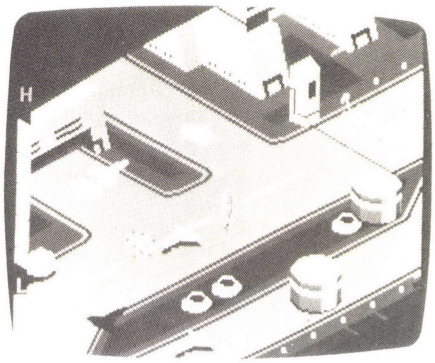
There are, of course, times when you *must* alter your pattern. Laser fields must be flown over, as well as Missiles taking off from their silos. You should try to destroy these, but if you can't you must evade them. Care should be taken to avoid the fire spewing from the rockets' tails as they launch, since the player's ship can be scorched.

Since the player cannot control the ship's forward speed, the vessel will automatically reach the end of the Fortress before long. At this point, you will encounter the final wall and soar into space. Enemy aircraft will begin their attack while an occasional fuel tank satellite will zoom past. If you're well-stocked, avoid these: best to concentrate on the Shuttles. If you're low on fuel, strike the fuel tanks by positioning your craft at its highest level.

As in the Fortress mode, fire constantly during the space duel, moving out of the way if an enemy aircraft gets the jump and draws a bead on your ship. *Zaxxon* will warn the player when this situation has arisen: a "beep" sounds and a small "x" flashes on at the nose of your ship. Shoot if you have the chance, but if there's *any* doubt get out of the way. Otherwise, *here* you can fly at a constant level, waiting for attacking Shuttles to reach your level and blowing them out of the skies when they take the bait. The second Fortress you approach will throw up several new laser barriers to block your flight path. These



Visible in this screen are the Fuel Tanks, Turrets, and laser barrier.



Your ship takes on enemy Shuttles, an Interceptor Missile, Fuel Tanks, and a laser barrier.

cannot be flown over. Instead, you must fly through the empty space between the wall and the force field. To accomplish this, fire missiles at the barrier to ascertain your height, then fire until they pass through the gap. Hold your joystick steady at this level.

After passing through the laser impasse, there will be several targets at which to fire. However, almost immediately a second laser field will force you to reposition your ship to pass through *its* gap. Until you've gotten very good, don't bother with the targets: concentrate on the wall, or you'll lose your ship.

After successfully negotiating a third laser barrier on the second Fortress, your ship will suddenly stop. The *Zaxxon* robot will approach, a mon-

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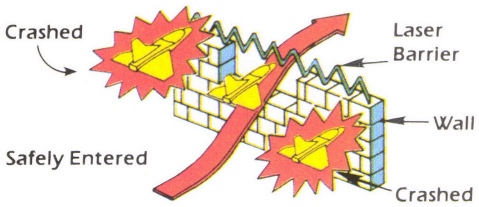
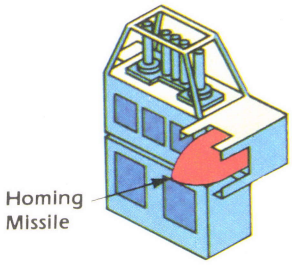




Details of two Zaxxon obstacles: the laser barrier and Homing Missile.

THE MARK OF THE 'Z'

The z's are taking over the arcade ... and we don't mean the kind of zzzzzzzs that cause one to snooze.

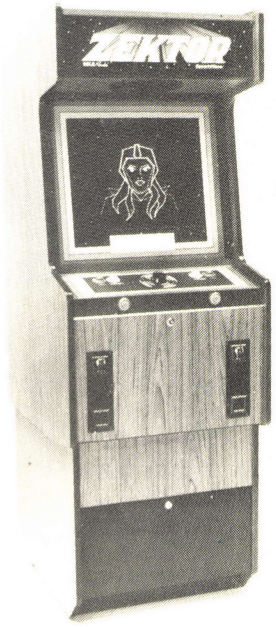
Now that *Zaxxon* is the top game in the nation, Sega/Gremlin has shipped *Zektor* to keep it company.

Zektor challenges the player to capture eight space cities which have been conquered by an evil cadre of alien robots. In order to liberate each city, the player must battle three attack waves of Enemy Fighters and Roboprobes, which fire murderous Zizzers at the player's ship. There are also three types of Moboids which can bounce, spin, or explode your vessel.

The game boasts some interesting sound effects, including the whizz of speeding rockets, the "zzzt" sound of the Zizzers, the skidding sound of the Moboids, the sinusoidal wave sound of the revolving barriers, and the starburst sounds of robot neutralization.

Interestingly, arcade operators can have *Zektor* by using Sega/Gremlin's Convert-a-Game process on old *Space Fury* or *Eliminator* games.

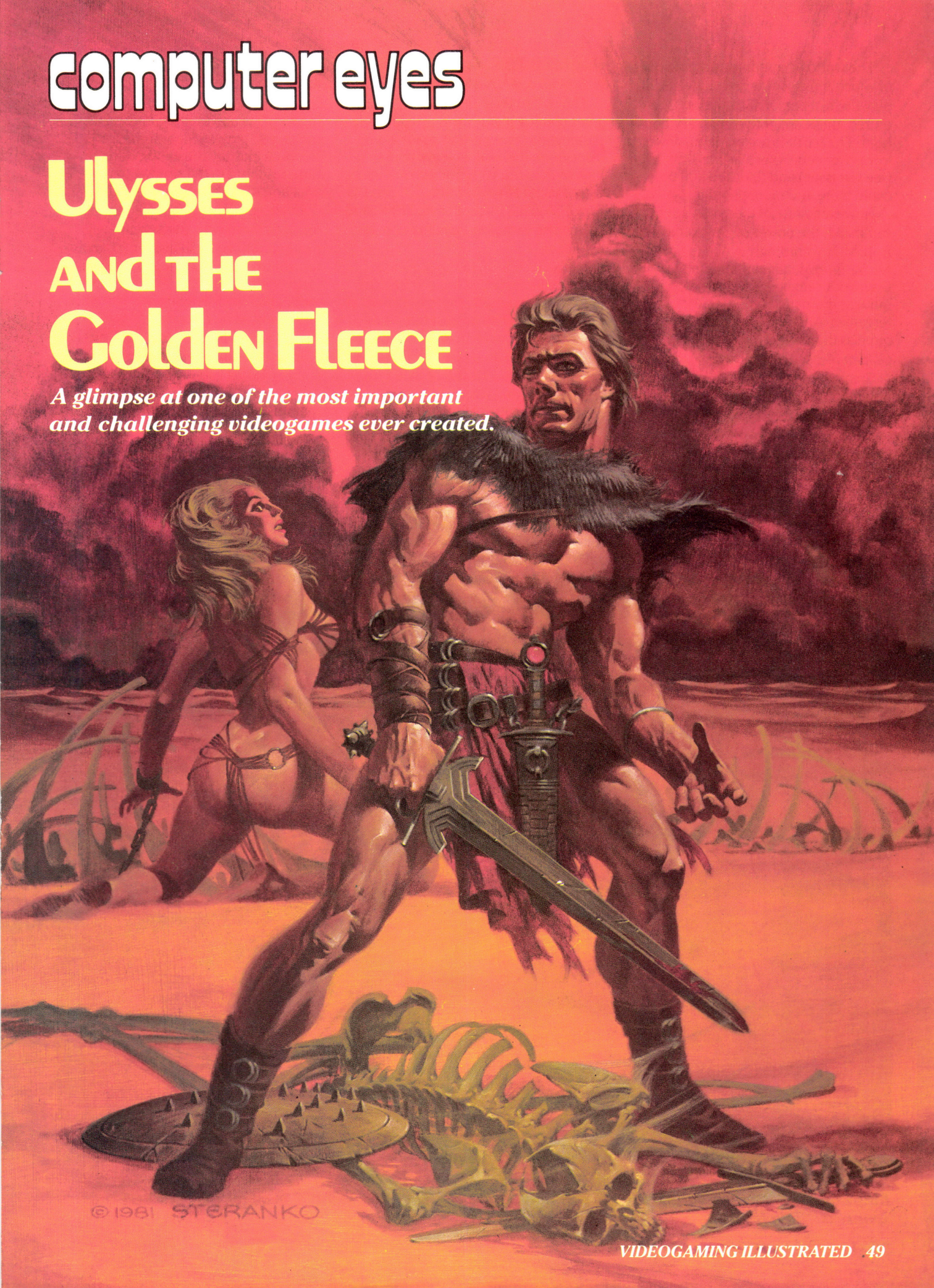
Less interestingly, there were twenty-six z's in this sidebar. The invasion has indeed begun!



The attract mode of Zektor shows a warrior-maiden beckoning would-be heroes to join her in defeating alien robots.

Ulysses and the Golden Fleece

A glimpse at one of the most important and challenging videogames ever created.



The world of computergames is one of which most people are unaware. To play them, a personal computer is required; these are not yet in every household. The barriers are breaking down as low price models such as the T1900A (see last issue) and the Atari 800 become more and more popular.

However, none of these computers can match the power of, for example, an Apple III. Accordingly, while the games are far more detailed than Intellivision, Odyssey, or related videogames, none is quite as dramatic as full-fledged computergames. And few computergames are quite as dramatic as *Ulysses and the Golden Fleece.*

Created by Bob Davis, the game paints a new, full-color panorama for every step of the journey taken by Ulysses. Whether the hero turns west, east, north, or south, there is a striking vista to greet him.

There are also demands to tax even the most diligent player. Your trek begins in a town square. In due course, you must visit the king for gold and a ship, then buy yourself supplies and hire a crew. There is also a chest to unbury in a dark wood, magic items to find and learn to use, storms at sea, uncharted islands complete with caverns to explore and disasters to avoid.

The computer gives you very little. It gives you the picture and provides a few parameters (ie, you can't go west, you can't climb the wall, you are in the king's vineyard, etc.). You communicate with it using two word instructions, GO EAST, TALK GUARD, LOOK TREE, and so on. The game's vocabulary is quite extensive.

However, it is up to the player to apply every last bit of logic to find the Fleece. For example, there is a guard at the docks. You can go past him — or you can stop and chat. Both will not help you in the long run. But if you order the computer BRIBE GUARD, you will be rewarded with a map. Similarly, you may walk through the forest trying to find the chest and not think to ask for a closer look at a knothole — in which there just happens to be some magic dust. Encountering a wall of flame, you may turn away without thinking to return to a nearby river and drench yourself to get through. (Which, by the way, will result in your immolation. There's another way to penetrate the fire which you'll have to discover on your own. That's the least of your problems, of course: behind the blaze lie a dragon and the great god Pluto.)

The point is, after an hour of gathering supplies and braving numerous perils, you may encounter the God Neptune and say the wrong thing to him, resulting in the sinking of your boat and the premature end of the game.

In all, computergaming is a thoughtful, patience-trying, ever-exciting pastime. Above all, however, it's an astonishing experience, a more personal form of escapism than motion pictures, more creative, involving and certainly less predictable. *Ulysses and the Golden Fleece* is but one of hundreds of programs currently on the market; in upcoming issues you'll be reading about other games which push at and expand the breadth of videogaming, and about new technologies which are helping to make them accessible to more and more consumers. At present, only diehard game buffs can justify the nearly $2000 expense of the hardware to play the software. However, enough people have made the move into computing for personal applications to nearly double game sales since last year.

Ulysses and the Golden Fleece is manufactured by On-Line Systems,

A typical picture with instructions from* Ulysses and the Golden Fleece: *"You are in the Entry-Hall of the King's Castle. There is a guard here. An exit is to the east. — Enter Command?" To which the correct response is: "Talk Guard."

36575 Mudge Ranch Rd., Coarsegold, CA 93614. It's available in versions for most of the popular personal computers.

RAMblings

The people behind the diskettes

The creator of *Ulysses and the Golden Fleece* is twenty-seven year old Bob Davis, an articulate and enthusiastic advocate of computergaming. *Videogaming Illustrated* spoke to Bob about his career and about the inspiration for his remarkable game.

VI: How did you become interested in computers?

BD: I'm actually a virgin — or rather, a rookie. I've only been at this a year. Before that, I sold chickens, and before that I was a professional musician. Not too glorious. Now I'm on staff at On-Line, where my job is programming, helping to come up with new games.

VI: Did you have any formal training?

BD: No, just on-the-job.

VI: The capabilities of the computer far exceed the more popular home videogame systems, yet their impact is only beginning to be felt in the field. Where are they going to go from here?

BD: First of all, we're going to see increasingly better sound and graphics. There will also be longer games. A good adventurer, staying awake around the clock, would probably take two weeks to complete *Ulysses and the Golden Fleece.* The rest of us will need six months. Our new *Time Zone* (covered last issue) will take you longer still. In a broader sense, within five years or so we'll be seeing computers hooked up to every phone and every television. The games will offer not only voice synthesis, which some already have, but voice recognition as well. We'll play them quite possibly in conjunction with special effects generated by videodiscs; certainly we'll be playing with friends in different parts of the country.

VI: And pundits say that computers are dehumanizing! What can the computer bring to the "Dungeons and Dragons" medium which dice and boards cannot?

BD: With dice, you aren't working with any logic. It's all chance. In computergaming — contrary to popular opinion — the computer doesn't do any thinking for you, it only acts the way

you tell it.

VI: One last question. Why did you slip the Ulysses character into the story of Jason?

BD: I bastardized it because Columbia Pictures had made a movie about the subject, and I wanted to avoid potential copyright problems. Reality has to intercede *somewhere!*

A TASTE OF COLD STEEL

It's impossible to capture the scope of *Ulysses and the Golden Fleece* without the benefit of the color graphics and the complete scenario of the game.

However, to give you a sampling of what your days and nights would be like on a voyage with the renowned adventurer, here are actual exchanges you will have with the computer while making the right — and some wrong — moves with the program.

The player's input is represented by "P", the computer's responses by "C". Remember: directors are indicated simply by indicating north, east, south, or west. Furthermore, you cannot skip any steps. For example, you cannot read the note below until you've first removed it from the bottle. The program is not tricky, merely meticulous.

C: You are on a three-way road in a small town in Ancient Greece. There is a store to the west with a fence next to it.
P: Climb fence.
C: You are in an alley in a small village. There is a tavern to the north and a store to the south. There is a gold coin here.
P: Get coin.
C: O.K.
P: Look door.
C: You see nothing special.
P: North
C: You are in a small tavern. Sometimes sailors wait here hoping for work. There are doors to the south and east.
P: Talk sailors.
C: They don't feel like talking. They need work.
P: Hire sailors.
C: Everyone looks at you in disgust. I think you had better find some money first.
P: Where money?
C: Find it yourself.
P: Give coin.
C: They have no use for the coin.
P: East.
C: You are on some docks. There seems to be a bottle floating here.
P: Get bottle.
C: O.K.
P: Look bottle.
C: There is a note in it.
P: Get note.
C: O.K.
P: Read note.
C: ECEELF.
P: Talk guard.
C: He asks, "Do you have permission to pass from the king?"
P: Yes.
C: The guard checks and says, "I do not have that in my records. You may not pass."
P: Kill guard.
C: That was rather foolish. The guard lops off your head with one fell swoop. Thank you for playing *Ulysses and the Golden Fleece.*

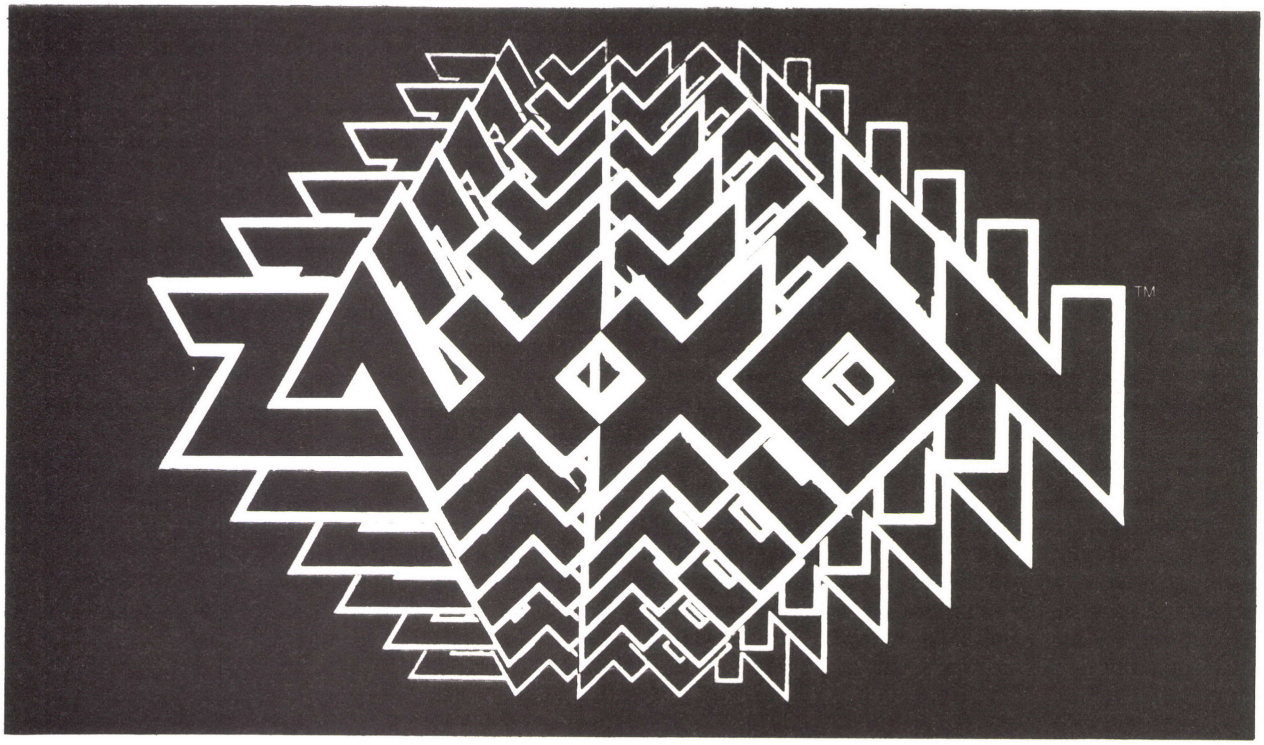
Had you tried a tack other than killing the guard, you'd have been more successful, for instance:

P: Give coin.
C: Are you attempting to bribe a guard?
P: Yes.
C: The guard accepts the bribe and gives you a map.

This map will prove useful on your journey — although, first, you must backtrack and find the king, getting both his permission to sail and the money to hire sailors, one of whom happens to be Hercules.

Always challenging, invariably frustrating, the program is a harbinger of participatory entertainment which is going to revolutionize the way people everywhere spend their leisure time. ▲

meet the original...



***Zaxxon** may be the most popular arcade game in the country, but it isn't the first time we've seen a miles-long alien fortress.*

The alien entrenchments loom ahead, you dive your ship toward them. Blasting away, you destroy ships and missiles, performing an Immelmann to avoid return fire.

You could be playing *Zaxxon* or, on the home front, Intellivision's *Star Strike* or Astrocade's *Star Battle.*

Or you could be watching your videotape of the climatic assault on the Death Star from *Star Wars.*

Or you could be enjoying any number of science fiction tales which use awesome, rootless extraterrestrial bases as a prop.

Unlike the theme of gorillas vs. women, surveyed in our last issue's *Meet the Original ... Donkey Kong,* the notion of interstellar or floating cities does not appear much before this century. Mythology offered the Greek Olympus, poised atop a cloud-piercing mountain, and the Norse Asgard, the city of the gods floating on Huergelmir, a celestial spring running from Niflheim, the land of mist.

In Jonathan Swift's satiric 1726 masterpiece *Gulliver's Travels,* our hero encounters the flying island of Laputa, on which a city has been raised. The isle is guided by its denizens, who block the sunlight from and hurl projectiles at earthbound villages until tribute is tendered.

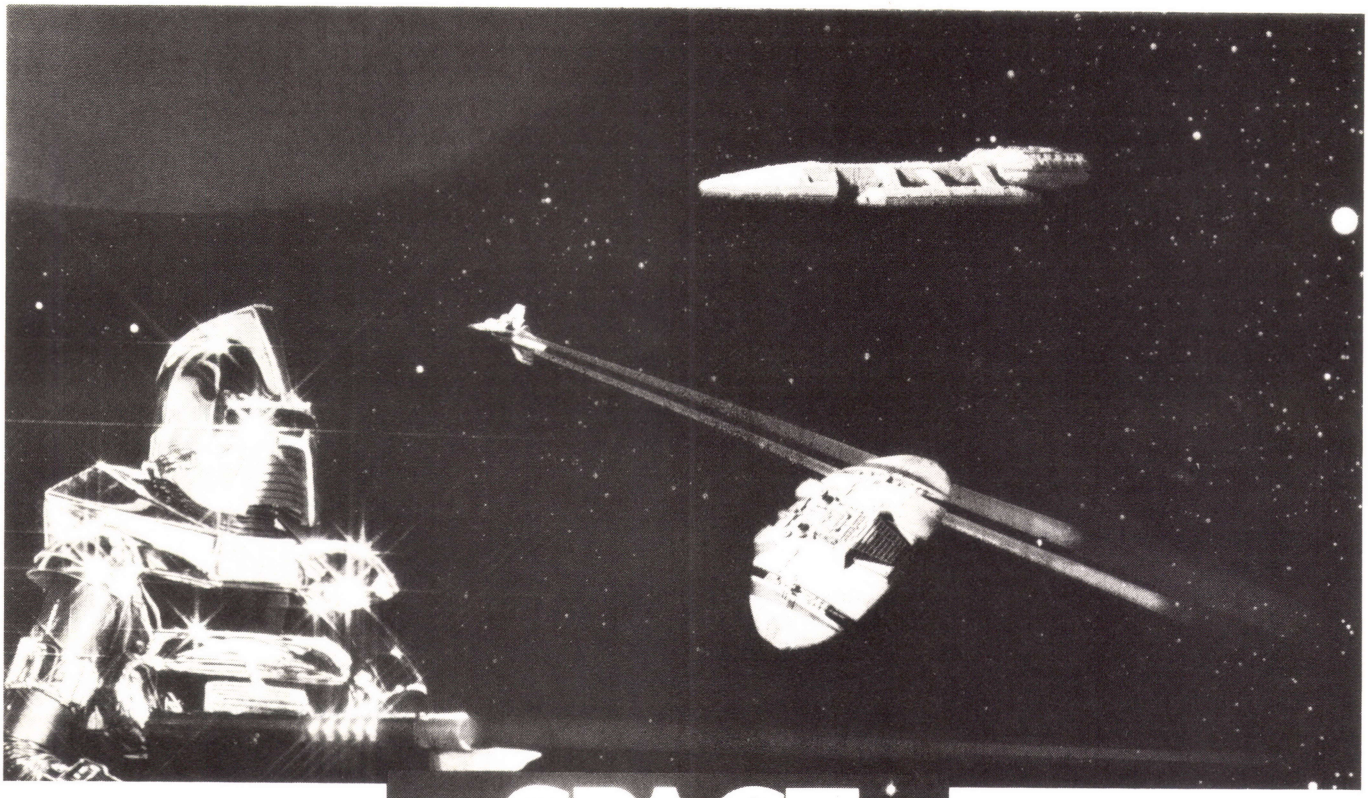
The first bonafide city-fortress in space was put there in 1869 by Edward Everett Hale in *The Brick Moon.* The author/clergyman — best known for his classic *The Man Without a Country* — told of a city prematurely hurled into space, bearing the builders and their families nine thousand miles from the earth where they live ever after.

Cities have been situated on other worlds, a popular theme in turn-of-the-century science fiction novels. Readers found them rooted to the Moon in H.G. Wells' *First Men in the Moon* and Edgar Rice Burroughs' *A Princess of Mars,* among many other works. However, cities hovering or drifting through space really came into their own with the boom in science fiction prose precipitated by the appearance of *Amazing Stories* in 1926. The success of that magazine spawned countless other SF publications, most of which featured spacefaring cities at some time or other.

Most prominent were Edmond Hamilton's *Cities in the Air;* James Blish's epic *Cities in Flight,* in which antigravity devices known as "spindizzies" lift cities like New York into space — where, remarkably, the inhabitants look for *employment* among the stars; Clifford D. Simak's *Limiting Factor,* about a giant metal world in space; Larry Niven's novels about Ringworld, an awesome wheel-like settlement orbiting a distant sun; and Arthur C. Clarke's *Rendezvous with Rama,* wherein a world-sized city pays us a visit from a distant solar system.

Comic strips and comic books have likewise featured space cities, the most famous of which is the sky-settlement of King Vultan in the comic strip and motion picture versions of Alex Raymond's *Flash Gordon.*

With the success of our nation's space shuttle, and with Russian activity in space moving toward permanent settlements, it is only a matter of time before there are *Zaxxon*-like fortresses in earth orbit and sailing starward. Let's learn from the dire vision of Swift, Raymond, et al and work to ensure that the similarity between life and videogames ends there ... !



Samples of fighter ships taking on large, city-size vessels throughout the course of science fiction history.

One of the most famous of the pre-Zaxxon monolithic ships was the Battlestar Galactica, from the TV series of the same name. The Galactica itself is visible near one of the Cylon robots — whose Zaxxon counterpart is a considerably more formidable foe.

input

Letters from our readers

To the Editor:
Regarding your Glitchery column in the first issue, Columbus sailed to the west, not the east. Sailing east, he'd have crashed back on shore.

Steve Burkow
Santa Monica, CA

Lucky for him we weren't navigating.

To the Editor:
I think it was obnoxious the way you used your book review page in the second issue to badmouth most of the videogame books on the market. They're not as bad as you think!

C. Berkowitz
Hartsdale, NY

Book critic E.C. Meade replies, "Actually, they're worse. And what's amazing is that there are more on the way, witness* Playing Donkey Kong to Win; How to Beat Atari, Intellivision, and Other Home Video Games; *and* Defending the Galaxy: The Complete Handbook of Videogaming. *It's some consolation that most of these books have been colossal flops. As for our criticisms being obnoxious, the books are worthless whether we say so or not — so we might as well say so."

To the Editor:
On the subject of Supergaming through enhanced sound, you neglected the *piece de resistance:* using a reverb or echo on the videogame sound. Doing so makes your explosions sound like *explosions!* If you add that sound the music, as suggested, you'll never bother visiting an arcade again.

Jay H. Wald
Whippany, NJ

We will be dealing with enhanced sound effects in an upcoming issue.

To the Editor:
I enjoyed your first issue, and found the article on "Supergaming" especially interesting. I have tried to find the Teledapter around town, but no one knows anything about it. Please let me know how I can get this device by mail.

Bill Slagle
Corpus Christi, TX

***You can write to Rhoades National Corporation at PO Box 1052, Highway 99E, Columbia, TN 38401 for information about all of the Teledapter units* or call, toll free, 800-251-8608.**

To the Editor:
With all the companies that are entering the videogame market, and with nearly one hundred cartridges available for the various systems, it's impossible to look at a package and decide which game will be worth thirty to forty dollars. Can you publish brief evaluations of every game on the market?

The Bastiens
Prince George, British Columbia

We're considering it. In the meantime, as useless as most of the books about videogames tend to be, two or three of them do offer ratings of virtually all the cartridges.

To the Editor:
I was very happy to pick up the second issue of your fine publication and read Richard Meyers' look at the state of the pinball industry. I'm as hopeful as Mark Ritchie regarding the future of the industry: I've seen people at arcades wander from crowded *Centipede* games and try their hand at pinball.

Although diehard fans resent the invasion of "our" field by computer-like designs and digital printouts, if change is the price of survival, I'm all for it.

I'm not sure that either the *Hyperball* rapid-fire approach, or the *Caveman* pinball-videogame approach is going to last. They seem more like gimmicks than like embellishments of the medium. But pinball can tolerate experimentation since the basic idea of the game is so sound.

One variation *I'd* like to see is a multi-level pinball game where you can choose the level on which you'd like to start. The game would be less predictable that way.

Please keep up your coverage of this video-related field.

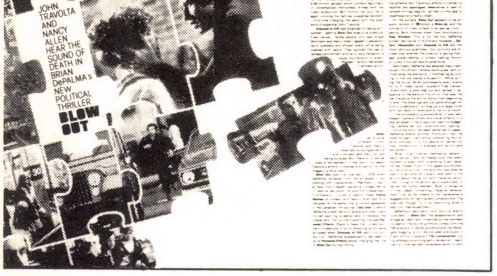
Carl Goldstein
Philadelphia, PA

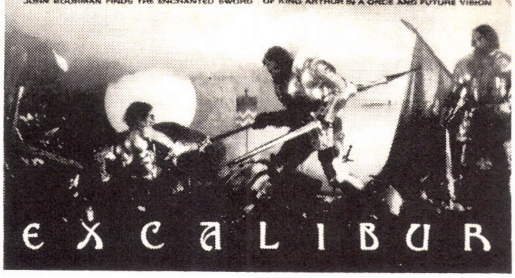
We intend to feature pinball articles whenever we happen upon an interesting facet of the industry. This happens to be the case with our next issue, when Richard Meyers takes a look at one of the more glamorous aspects of the pinball industry.

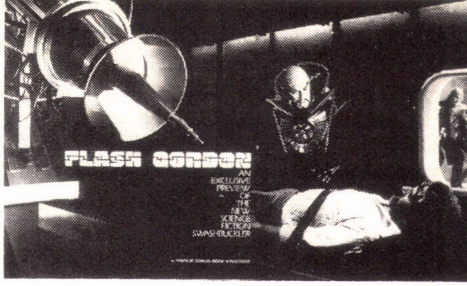
To the Editor:
I'd like to know what your staff thinks are the best of the home videogames. And while you'are at it, no one's ever given a definitive answer as to which of the home units really *is* the top-of-the-heap.

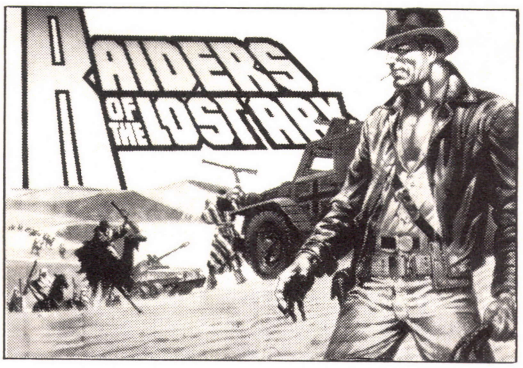
Pauline Price
Colt's Neck, NJ

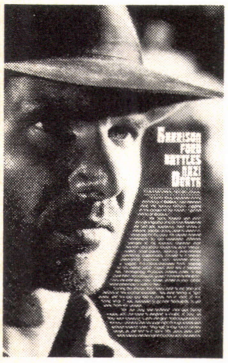
We're preparing a comprehensive look at all the home units, and plan to compare them all early next year. As for which videogames are the best, it's obvious that everyone's taste and opinion is going to differ. A football fan might find Intellivision's cartridge yards ahead of any space game, while a science fiction fan may swear that ColecoVision's exciting* Cosmic Avenger *is, was, and always will be the most challenging videogame of them all. What we have to say pro and con to you will be cited in our Preview section, but the "best" labels are ones we feel should be left to the individual players.

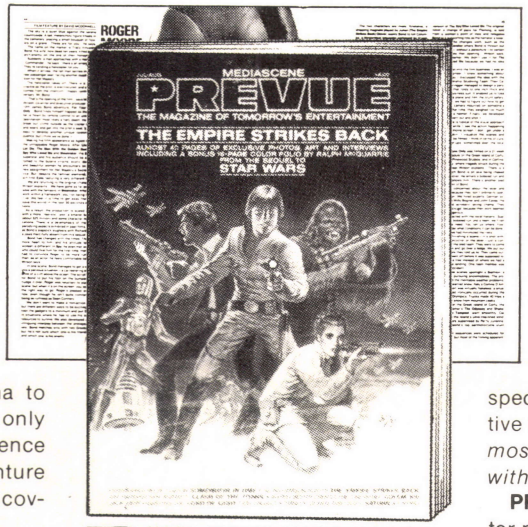












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There's even more! Previous issues have featured giant 12x36" Double Gatefold Centerspreads, 40-page Animated Flipbooks, Full-color Pull-out Poster Books, Bonus Insert Posters, 20-page Film Preview Photobooks and 16-page Color Art Portfolios—at NO EXTRA COST!

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E.C. Meade looks at books

Last issue, we reviewed all the videogame books you're going to see in this column. To paraphrase Milton, we show mercy by not meting out the justice those wretched volumes deserve.

If you are a *Robotron* buff, tear yourself away from the arcade and snatch up a new Fawcett paperback with the cumbersome title of *What If You Were . . . the Last Man on Earth.* Edited by Isaac Asimov, Martin Greenberg, and Charles Waugh, this collection of short stories carries the *Robotron* theme of Armageddon in various directions.

Science fiction buffs will note that this volume reads like a who's-who of the genre, with tales by A.E. van Vogt, Lester del Rey, Clifford Simak, Poul Anderson, and others. The rest of you will find most of the material imaginative and well-written, especially Edmond Hamilton's evocative "In the World's Dusk."

Needless to say, the famous two-sentence-long end-of-the-world science fiction story is included, reprinted herewith: "The last man on Earth sat alone in a room. There was a knock at the door . . .".

The book is a bargain at $2.95, if you can live without ten games of *Robotron.*

Judging by the quick death of Walt Disney's most ambitious film, lots of people were able to live without *Tron.* Even more people were able to live without the novelization by Brian Daley. However, if you can still find a copy it's worth a look; Daley does a decent job fleshing-out those aspects of the film's narrative which were threadbare.

The work's greatest drawback is that Daley should have been more carefully edited throughout. Case in point: "Dumont turned as the cell door opened, ready for death." We don't recall any cell doors dying in the film.

Tron is available for $2.75 from Del Rey.

Leaving fiction behind — which is usually a relief these days, so much of it being hogwash; good ideas are hamstrung by illiteracy or, worse, bad ideas are hamstrung by illiteracy — we turn to dependable old Dover Publications.

Before you ask, "What do *Hand Shadows to be Thrown Upon the Wall* and *Magic Tricks and Card Tricks* have to do with videogaming?" permit us an explanation; if you will, a belated summary of what this column's about.

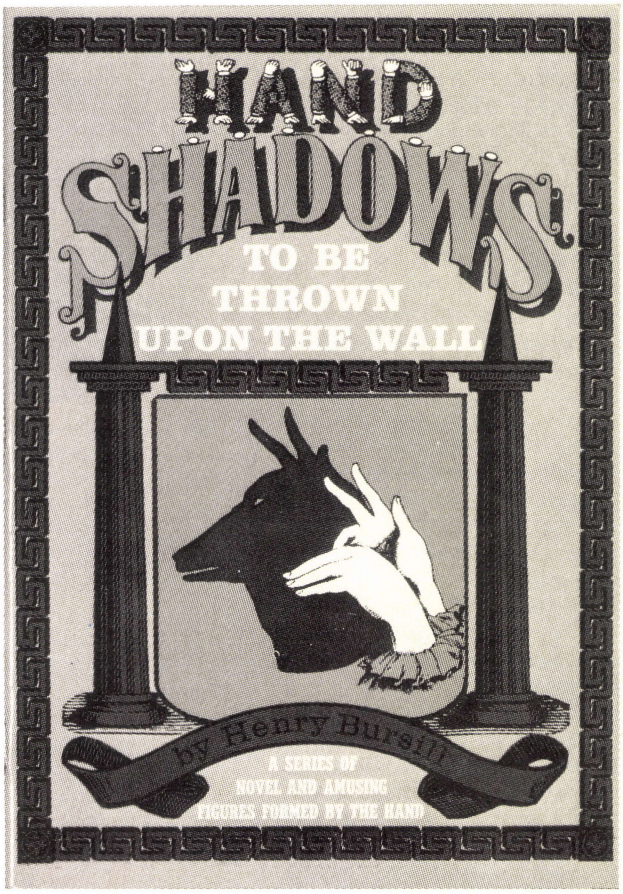
Print Out reviews books which manage to translate the excitement of videogaming into another medium; which illuminate aspects of videogaming or computers with more than mere "How to . . ." claptrap; or which expound upon amusements that are beyond the present reach of the VCS and computer media. It is in the latter category that the two new Dover books fall.

Hand Shadows to be Thrown Upon the Wall is the kind of book you'll wish you had when you were seven years old. (Perhaps some of our readers *are* seven years old, in which case have a ball.) Today, the opus is primarily of intellectual interest, of course — though you will be tempted to make *some* of the shadow shapes, particulary Dog Toby. It's something else to do with your Stroblaster.

This present volume is a facsimile of the 1859 edition by Henry Bursill, and is worth every cent of its $1.35 price tag. *Magic Tricks and Card Tricks* is another of those where-was-it-when-I-was-growing-up volumes. You'll learn how to make coins, knives, matches, and eggs behave in strange ways; and you'll amaze your friends with your ability — at last! — to pick the cards they chose from a deck, among many other wonders.

The only drawback to this Wilfrid Jonson book is that the illustrations are wretched. They suffice for the purpose at hand, but the crude Crayola renderings cheapen the package. Still, it's quite a value at $2.00.

Next issue, we'll be taking a peek at the sequel to the most famous computer novel of all-time. Until then, remember that reading may be slow, but it doesn't shoot back. ▲



Close Up
Continued from page 12

"Since video games are smaller than movies, one person can take on several jobs. I would be considered the director and scenic designer. The programmers would be my camera, lighting and sound personnel. The hardware people would be everyone else."

While the design team toils, the company is taking care of business. They want to make sure that everything is ready on their end when the conceptualizer arrives with the finished machine. "The companies usually handle the cabinet and the various 'interfaces,' " Cicak maintains, "meaning the control stick and that sort of thing. They look at it from a manufacturer's point of view. They have to be sure that they can mass produce it efficiently which is why they handle all the peripheral things like the outward appearance of the cabinet. The designers handle everything on the screen."

It all comes together at this point. The team sticks their hardware and software into the company's cabinet and thus a videogame is born.

One, lone machine that has hopefully lived up to all the creators' expectations.

But the process does not stop there. Manufacturers have learned the hard way not to be content with their own tastes. The final judge has to be the player — the person with the coin. In other words, you.

"The company makes a few machines and puts them on test in various secret locations all over the country," Cicak reveals. "Sometimes they don't even reveal the name, to make it more mysterious. After all that time, effort, and money, they don't want their competitors to steal any thunder."

All the secrecy is understandable given just how expensive that thunder can be. Cicak says that a minimum price tag for the development of a single new videogame is a half-million dollars. There have been cases on record where the cost has gone as high as three million dollars. And if new technologies are researched and forged, new kinds of chips or controls, the expense may soar ever higher.

"The company will watch the prototype games in the field, and keep records of the two 'M's," Cicak continues, "money and maintenance. Depending on that they will make their final decision, which is usually one of three. One: it's ready to go. Two: it needs changes. Three: it's a worthless idea."

For reasons explained by game designer Joe Cicak, the cabinets and artwork which adorn them are standardized for a very good reason: they must be mass-produced as quickly and as inexpensively as possible.

Thankfully, Cicak has never had many worthless ideas.

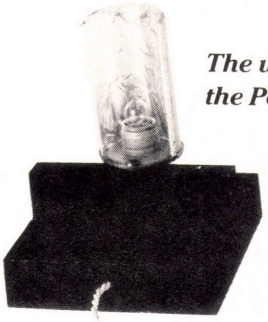
Although he and his contemporaries work well under the present conditions, Cicak is looking forward to a future of even greater accomplishment and challenge.

"The systems we're working on now will become more and more flexible until even someone with no programming experience and only a basic understanding of the equipment — like me — will be able to sit down and make it almost all work. That is some years away yet, but not as many as people seem to think. You'll be able to invent arcade games at home before long."

So, hopeful designers you have a choice. Either start making your company contacts now or sit tight and wait for the fast-approaching future. It will be glorious, it will be invigorating, and it will *never* be boring. ▲

Supergaming
Continued from page 18

Next time you finish a roll of bathroom tissue, take the roll and cut it to a height of approximately 2½″. Slice it in half, lengthwise. Take a 3″ x 3″ sheet



The wiring inside the Power Unit.

of aluminum foil and lay it inside the makeshift dish, using tape to fasten it in back. Use one of the "super glues" to cement the dish to the lamp base.

Obviously, you can experiment with the size of the roll until you get the maximum flash; this was the only one we had time to build.

In any event, this dish is much more fun to create than simply pulling apart a flashlight, and is more of a conversation piece when one of your fellow videogamers asks how you did it.

What we have done to date is given you instructions on how to enhance the sound of your videogaming (*Videogaming Illustrated* #1) and add some flair to the explosions via stroblasting.

Next issue, we'll be taking you in a new direction entirely as we tinker with the hardware to make gameplay easier. ▲

Triple Play

championship videogaming

To the Editor:

The strategy in your first issue regarding *Laser Blast* is good, though I use a different one which also works well.

1. Fly the ship to the extreme right, then immediately to the left.
2. Fire straight down at the gun on the bottom left then move to the middle of the screen. Fire straight down on the middle gun.
3. Move to the right, firing straight down on the right gun.
4. Go left and pick them off left to right each turn. It is best to fly at full speed and as high as you can.

John Thomas
Tampa, FL

We found that more often than not the second base will pick you off as soon as you've blasted the ship on the left.

To the Editor:

In his otherwise superb review of *Turbo* in your second issue, Randy Palmer neglected to mention an important aspect of getting around the Cylinder.

While circling it, you can actually *drive* on the fringes of the base of the Cylinder, thus giving yourself an extra buffer in which to pass. The seaside barrier, as he noted, offers no such option.

Nina Anderson
Pacific Palisades, CA

To the Editor:

I really enjoyed the tips you provided in the first issue on how to play *Defender*. But there is a small tip I'd like to contribute, one which is little-known even to expert players like the one who wrote your article.

The strategy concerns the "International Date Line" to be found at the tallest mountain on the planet. When the ship is on the left, the Mutants will attack. However, if the ship slips over to the right, past the invisible "Date Line," the Mutants will continue to go left, going all the way around the planet instead of heading toward the player on the right side.

Another small hint: when Smart Bombing Pods, pressing the Smart Bomb button and the Reverse button at the exact same time will ensure that no Swarmers survive.

Apart from having discovered these little tricks, I must confess to being a lousy videogame player. I spend most of my quarters on pinball.

P.D. Sanderson
British Columbia, Canada

To the Editor:

You haven't done a strategy session on *Yar's Revenge*, but you may wish to inform your readers that there's a secret message hidden in the game. I discovered that if you destroy a Swirl in mid-air, a thin, black line will appear where the Zorlon cannon intercepts it during the brief time the horizontal colors appear. Fly your Yar to the right and left and right of the black line, staying close to it. When the horizontal colors disappear, the designer's initials "HSW" (Howard Scott Warshaw) appear frontward and backward.

David K. Nichols
Wilmington, DE

To the Editor:

You article in the first issue of *Videogaming Illustrated* on Atari's *Superman* game was very good, and the strategies were among the best. However, there's one trick I'd like to pass on to your readers.

You mentioned that it's impossible to become Superman until after the bridge explodes. Well, that's not quite true. When you turn on the cartridge, Superman will appear at the top of the screen. Don't change into Clark Kent. Just hover in the air, pressing your action button (X-ray vision) and staring at the bridge. Keep staring as you move your joystick to the left. Superman will fly off the screen. You'll have your full roster of powers, and there won't be any bridge pieces to pick up since the span will never have exploded!

I like experimenting with videogames this way to see what little tricks can be learned.

Joel Callies
Nashville, TN

We'll do you one better. If you don't bother turning on the game at all, you won't have to catch a single criminal.

To the Editor:

Your strategy about Conquering *Superman* in your first issue was very good, and as you predicted it brought my time down to the two minute mark. However, I have since discovered an additional strategy.

After the bridge explodes, the pieces can always be found at the following places: H J, and O, according to your map. If you rush to those spots and assemble the bridge at once, you won't have to worry about the helicopter coming along and scattering the fragments.

My best time using this method is one minute and twenty-four seconds.

Dave Turner
Spokane, WA

The strategy is indeed a good one, and we marvel at your excellent time. The sole drawback of this method is that while you're preventing the bridge from being strewn all over the landscape, the villains are busy scattering hither and yon. We ran the game your way twenty times and found that in slightly more than half, you encounter the scattered pieces of bridge more frequently than the scattered villains.

Speaking about* Superman, *we've been meaning to apologize for not lettering the maps of Metropolis to coincide with references in the text. Fortunately, most of you deduced that panel "A" was in the upper left, and that the scenes progressed accordingly. Obviously, the Man of Steel was not in charge of magazine production.

eye on

Continued from page 10

dodging missiles. On occasion, the pilot must descend to refuel or rescue fallen allies. As in *Gangster Alley,* play carries from daylight to darkness.

**Tape Worm,* a food hunt wherein Slinky the worm, Spanky the spider, and Beeky the bird all try to eat the player, who is moving about the screen trying to gobble down fruit.

**China Syndrome* is the name of a disaster game set in Spectraville, where an earthquake has cracked the core of a nuclear power plant. Players must recover loose particles of radiation, doing so before there is a meltdown.

The New York based company expects to release new games early in 1983, although no plans have been formulated as yet.

IT WAS BOUND TO HAPPEN

What with the profusion of "space" games, "invasion" games, and even "frog" games — to wit, *Frogger, Frog Bog,* and *Frog Pond* — we have at last seen the coming of the non-videogame.

Licenses to manufacture merchandise based on the most popular games is expensive, too costly for most small companies. Thus, they are showcasing games which don't exist in genres which do, thus summoning up the "feel" of a *Space Invaders* or *Asteroids.*

Typical of this generic breed are notebooks now on the market. Boasting covers featuring *Cosmic Command, Astro Collision, Space Pinball,* and *Planet Invaders,* they save their creators inhibiting fees and allow everyone to get a piece of the videogaming pie — their own private vector, as it were.

Good trend or bad? The license holders are sure to cry "ripoff," to which the manufacturers will retort "free enterprise." For a slightly more objective view, tune in to next issue's Keyboard.

Just one of the many "generic" videogame offerings currently on-sale.

RAIDERS OF THE LOST ARCADE

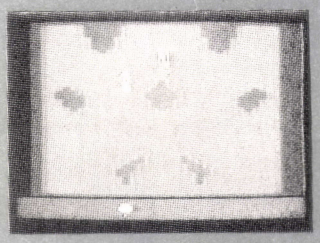
While Atari's on the move in new technological avenues, they're also beefing up some of the old ones.

As announced in our first issue, the lovable old Atari Video Computer System will have a prestigious new cartridge come December: *Raiders of the Lost Ark,* based on the hit film of the same name. At the time of the first report, little was known about the game. Now we can tell all!

Indiana Jones, the man in search of the lost ark of the covenant, must journey through thirteen rooms, pitting his skills against various natural and artificial dangers from snakes to pits. Everything that Indiana requires to collect the ark is distributed through the thirteen rooms: whips, knives, revolvers, swords, etc., each room amounting to a distinct game which Indiana must conquer.

Atari has developed a new and powerful computer coding system — one which no other cartridge manufacturer possesses — to put more on a VCS system than ever before.

The cartridge will sell for $37.95.



Indiana Jones — he's the shape with the floppy hat — moves among obstacles in search of the lost ark. This is but one of the thirteen screens featured in the upcoming Atari game.

ITALIVISION

Activision isn't alone in its thrust to capture a large share of the overseas market. Intellivision recently launched a massive campaign to make their games numero uno in Italy. No other videogame company has undertaken so massive a program in that country.

eye on

Using the international soccer matches in Spain as a topical hook, Mattel showcased their cartridge version of that sport in its advertising, capturing the rest of the audience by promoting *Astrosmash, Space Battle, Star Strike,* and *Space Armada.*

The cartridges are selling for 50,000 lire, or approximately thirty-five dollars. We can see it now. As international currency fluctuates, people fly overseas on massive cartridge-buying sprees . . .

WHO SAYS THEY'RE BAD FOR YOU

Detractors of computers take note: last month, the co-founder of Apple Computers, Stephan Wozniak, backed a three day rock music festival in San Bernardino County, CA. There were over twenty acts at the "U.S. Festival," including Police, Tom Petty and the Heartbreakers, Fleetwood Mac, and Santana.

Wozniak said he was committed to keeping America vital by uniting the resources of business, technology, government, and education together. He added that the music was a means of showing people how by working together society could be improved.

Encore!

THE COUNT'S RISING

No, not Dracula — although he's rising to new life in a Universal Pictures videogame. In this case, however, the count's rising on the number of videogame companies producing cartridges for home consumption.

The latest to join the ranks is First Star Software. The company consists of two film producers and a programmer; naturally enough, they're going to produce and sell games based exclusively on theatrical films and TV shows. Most of these will be based on upcoming works, much like book novelizations of screenplays tie-in to new releases.

There is both danger and reward in this track. The danger: obviously, tens of thousands of dollars can be spent deriving a game from a movie which turns out to be a flop. If the game is exciting enough, it may transcend the failure and take on a life of its own; if the film taints its tie-ins with the gloss of failure, forget it.

The rewards come when the film is a hit: if someone had an *E.T.* videogame on sale during the first few months of that film's release, it might well have shattered all records.

Judge for yourself whether foresight or fortitude is behind the first stars from First Star. The initial releases tentatively slated to be *Future Gold* and *Arcade,* based on a pair of upcoming films.

AAA

Apologies: we managed to forget a few credits in our last issue, and announce them herewith. Isaac Asimov's article "The New Learning" was originally published in *Apple* Magazine, reprinted because we thought it deserved a wide audience. Magnificent, too, is the work of Vincent DiFate, whose paintings graced pages 19, 25, and 29. The sketch on page 53 was also his. George Torjussen, an artist non-pareil in terms of realism, handled the chores on the *Turbo* art. Pat Boyette rendered the Headless Horseman which graced page 66.

Acknowledgements: this issue, Don Maitz provided the paintings on pages 19 and 31. Jim Steranko gave *Ulysses* its graphic dynamism, while Mr. DiFate returned with the awesome *Zaxxon* spread. Jim Laurier helped give *Robotron* some visual punch, and Pat Boyette did the honors once more on *You Read it Here First.* Boyette was also responsible for Pitfall Harry's atmospheric backdrop.

Addenda: our coverage of the new science fiction thriller, *Videodrome,* originally announced for this issue, will appear in our fifth edition. The film was postponed until early next year, and there was no point previewing it so far in advance. For those of you who wrote with questions about our second issue, yes, the screen on the bottom of page 62 was from Astrocade's *Conan.* As for the book pictured on page 64, that's a new Lyle Stuart publication, better than most in the field. Lastly, in our first issue we reported that Filmation Studios of Reseda, CA, had landed the rights to do a cartoon series based on *Pac-Man.* Untrue. They had been negotiating with Bally to do so, and Filmation assumed the prize was theirs — but rival studio Hanna-Barbera actually took the honors. That's show biz, folks.

SEVEN MORE WAYS TO SPEND MONEY

Apollo is tempting your wallets along with the other companies: four new games are just going into release from the Texas-based software manufacturer. All are for your busy little Atari VCS.

In addition to the recently released *Infiltrate,* featuring an agent poking about a secret government site; *Kyphus,* a maze game set within a pyramid; and *Guardian,* a space battle game announced last issue as *Cosmic Combat,* the new Apollo cartridges are:

**Final Approach,* an air traffic controller game created by an air traffic controller;

**Wabbit,* a game about a wascally cweature who's eating up a carrot patch, and the efforts of the farmer to get rid of the pest;

**Labyrinth,* being the perils moving around an active volcano;

**Vat's Incredible,* a cartridge in which the player must stomp grapes into beverage.

Another space game announced last issue, *Blue Angels,* is still being worked on according to an Apollo spokesperson.

Apollo continues to produce some of the most innovative and ambitious cartridges on the market, and it will be interesting to see how they fare in the upcoming gift-giving season against the giants who have recently entered the field.

NO LAURELS HERE

As if starting a new software company weren't

enough, the people at Spectravision have also released a new joystick which they call "Quick Shot."

The selection of "Quick Shot" for a name is self-evident: it features a two action button system (one on the top, the other on the left side of the base). The stick itself is a contour hand-grip and, its most novel aspect, "Quick Shot" features a non-skid suction cup on its base. Stick it to the floor, table-top, etc., for one-handed operation.

"Quick Shot" can be used in conjunction with the Atari system, as well as its 400 and 800 computers. It also fits the Commodore VIC-20.

The Spectravision control sells for $13.95.

TILTING AT VIDEOGAMES

For the first time ever, Williams Electronics is offering a medieval game which gives players a chance to challenge one another in head-to-head competition or battle a common enemy — the videogame itself.

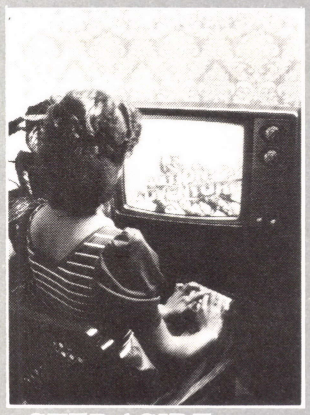
The recently released arcade game is called *Joust,* and it is one of the most exotic games ever created.

Each player begins the game mounted astride an ostrich-like being. The players operate interesting "flap" buttons as well as joysticks, flying their storks in search of adventure in Williams' mythological world.

In the single-player game, as you romp about, enemy riders astride buzzards attempt to unseat you. A successful joust scores points for the player, turning the enemy into an egg that must be picked up before it hatches into an even more dangerous adversary.

In the dual-player mode, the waves are more complicated, including a rather vicious mode: called the Gladiator wave, it enrouages players to battle one another, awarding a cache of bonus points to the victor.

The animation in *Joust* is extremely life-like, with some of the more unusual sound effects one is likely to find in an arcade game.



STEP ASIDE, DUKES

Videogames have done more than successfully work their way into our eating habits, they're taking over cable television as well.

The Games Channel is a new system which offers videogames play twenty-four hours per day. Cable TV subscribers can pick from the top arcade and home games, the selection of which changes monthly. A minimum of twenty games is offered during any given month, five of which are replaced at the end of that period by new games.

The system becomes available once a special microprocessor unit is installed in the home (usually for a flat rate of fifty dollars). The fee thereafter is under fifteen dollars a month per subscriber. The games are loaded into the microprocessor via the cable: in essence, all you're doing is "borrowing" the program. Because the "memory" of the microprocessor is so much more than most of the home games, the graphics are accordingly superior.

The Games Channel promises that there will always be a balanced blend of adventure, arcade, computer, educational, fantasy, and role playing games. They have made certain that the microprocessor can be used in other household applications as well.

If your local cable system does not offer this exciting new interactive capability, contact them or write directly to The Games Channel at 1438 North Gower St., Box 22, Hollywood, CA 90028.

facetiae

The column which dares you to identify five popular home videogames based on the following verse.

I
Grief is such a major part
Of trips from France to Nome;
Here your troubles do not start
Until you head for home.

II
Don Quixote was undone
When windmills he did tilt at.
This game offers kindred fun
Plus more ways to be killed at.

III
Ice is nice, or so they say,
If you are playing hockey.
This time you must save the day
As a rebel space jockey.

IV
Enemies defend the trench
That your fleet craft must cross
Shoot 'em or endure the stench
Of your world blown to dross.

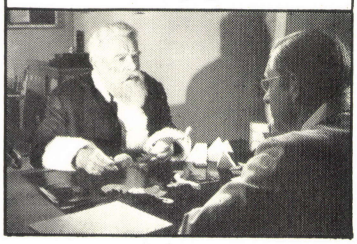
V
Hunting treasure, to be frank,
Is what this game does best.
Either you will walk the plank
Or find the hidden chest.

Answers:
I: *Lost Luggage,* II: *Barnstorming,*
III: *The Empire Strikes Back,*
IV: *Star Strike,* V: *Pirate's Chase*

Does office routine sap your sanity?

Do you yearn to get away from it all?

Do simple problems stump you?



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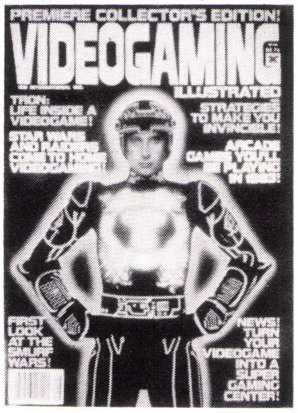

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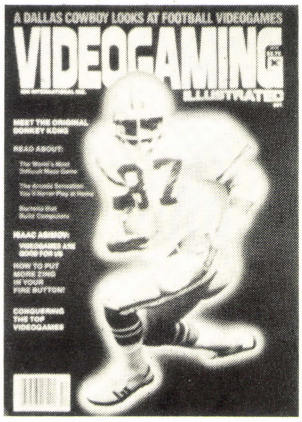

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Robotron

Continued from page 44

are, the fewer Tanks will burst forth upon the screen — and upon you.

Shoot as accurately as possible as long as you do so as swiftly as possible.

Once the Cuboids have been vanquished or escaped, you are besieged by an army of Tanks. These are capable of "blowing their stacks" with lethal "popcorn bombs" called Sparks. These bombs bounce off the border of the screen, moving faster each time they bounce. Although the bombs can be destroyed by a laser bullet, chances are good that one of them will "pop" your Supermanoid. Since you can't dodge the bombs forever, nor shoot them all unless you've the experience of a Han Solo, dispatching the Tanks themselves is the only answer.

Tanks are large, move slowly, and are easy targets. However, Hulks tend to group around them, displacing your shots. Moving in a semi-circle will draw the Hulks and allow you to dart to the resultant opening for a clear shot at a Tank — though players must simultaneously avoid the popcorn bombs, which may force you to move before you can shoot through an opening.

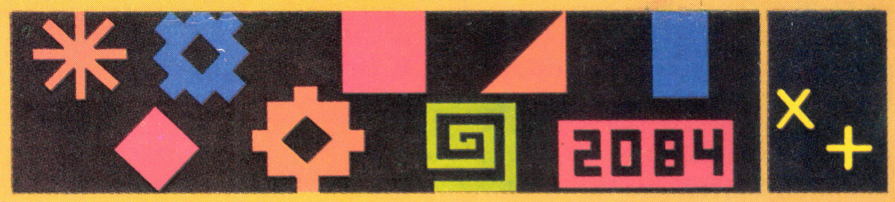
Don't stand your ground at the expense of a Supermanoid; you'll get another shot at the Tank, but to do so you must first survive!

Following the Tanks, *Robotron* gives the players a brief respite. Wave Eight is "just" Grunts, Hulks, Spheroids and Enforcers.

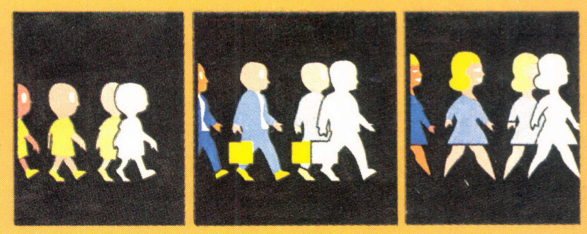
With Wave Nine, the border of the screen vanishes, and the field is literally packed with Grunts. The player has more room to move with the border gone, but the Grunts can just as easily corner you since there are more of them than before.

In these waves, use the same plans outlined above. Don't worry about picking up the humans in Wave Nine and onward. They're there of course, but your concentration must be on survival.

Make a "hole" in the Grunt pack, step into it, and shoot your way to the side of the screen. Once there, push the right (firepower) joystick toward the opposite side as you move the Supermanoid up and down. This maneuver will rid the place of Grunts and give you more room to move. When you can do so, drop to the bottom of the screen, firing upward. You'll be able to blast at a wider area, will have a barrier protecting your back, and will have more room in which to maneuver.



Electrodes ***The Signpost*** ***Sparks***



Humans being transformed into Progs

Reaching Wave Ten, the player will have survived to the year 2084. You'll know this by the "signposts" plastered all over the screen. Be wary of these; they're disguised Electrodes and must be shot away.

You are welcomed to 2084 by another Brain Wave, chock full of everything except Tanks. Dozens of humans, mostly Daddies, litter this wave, and many are foredoomed to be transformed into Progs. It is, of course, up to the player how many will be saved by risking Supermanoids: by now, the Brains are sending out Cruise Missiles faster than ever.

Again, if you can clear a path to a human, go for the points. More important, however, is staying alive.

Robotron does not end here, but moves onward to Wave Eleven, Twelve, and so forth. You'll have to play for some time before you see these later levels. However, chances are you'll have the skills down pat by the time our robots really *do* revolt. ▲

"NO MORE MR. NICE GUY."

"I'm not my old lovable self when I'm around cigarettes. I get real cranky. So I want all you smokers to quit once and for all. And who knows? You might even put a smile on my face."

American Cancer Society

This space contributed as a public service.

Zaxxon

Continued from page 48

strous machine with the uncanny ability to move from your line of fire.

You will be able to move as before with every advantage save forward motion. Do so as you try to strike *not* the robot but its guided missile. Six direct hits are required to neutralize the missile. Fire continuously as soon as the robot appears, even before the projectile leaves its hulking form. When you score a hit, the robot will jitter and flash red. Keep plowing it with fire no matter what histrionics ensue.

Unless you are extremely lucky — or extremely sharp - the guided missile will leave the robot's metallic hide to seek you out. Luckily, the missile is slow, which allows you to hit at it; but because the missile can evade your fire, it'll take quite a bit of hand-eye coordination to tag it in flight. *Hold your ground rather than try to dodge the missile!* Your chances of striking it are better than your chances of avoiding it.

If you manage to neutralize the missile, it will turn green. If you don't, your ship will turn red and fly into a glittering rain of debris.

Once the player has managed to destroy the missile, *Zaxxon* moves on to the next difficulty level. It returns you to the first Fortress, with the exception that the Interceptor Missiles lift off more quickly, the Turrets are now active, and the enemy Shuttles will fire at you even before lifting off from the Fortress.

As if this were not trying enough, the space through which your ship can safely pass the laser barriers becomes progressively smaller, and fuel is consumed at a faster rate as well.

In short: always keep shooting, always be prepared to dodge, and always keep enough quarters on-hand in case all else fails.

ZAXXON *Scoring*

Enemy Shuttle on runway: 50 points
Enemy Shuttle in space: 100 points
Interceptor Missile: 150 points
Gun Emplacement: 200 or 500 points
Homing Missile: 200 points
Fuel Tank: 300 points plus replenishes fuel
All Shuttles destroyed: 1,000 points
Radar Tower: 1,000 points
Robot: 1,000 points
(Note: refer to the first issue of Videogaming Illustrated *for a look at Coleco's home version of* Zaxxon.)

star words

Helen Hayes

Star of Stage and Screen

"I can't bear to think about entertainment becoming entirely electronic. Maybe I'm just too old to take up things like that, but I'm really depressed about computers in general. I think it's terrible that hundreds of thousands of computers are being used in our schools. In losing the 'little red school house,' we're losing our humanity."

Bette Davis

Legendary Actress

"I think without doubt that videogames are absolutely horrendous. Mentally they're horrendous. I think it's better that families play real games together. Checkers. *Scrabble. Monopoly.*

I think it's ridiculous to try and play those games or others like them on a TV screen. If I were bringing up children today I wouldn't allow it. I think it's terrible on their eyes; I don't think the next generation of people are going to have any vision! Half the time they're in there playing those games they should be outside playing other things. Or reading books. I've heard that people think they are therapy: come *on.* Let's have aggression with one another and get it out of our systems."

Patricia Neal

Star of The Day the Earth Stood Still and Ghost Story

"I think they're *great!* I mean, I love the older games like *Monopoly* and *Scrabble,* and I'm *very* good at marbles and bridge.

But videogames are good for one. Some of them force you to use your mind, and you get rid of your aggressions through them. Even detractors have to admit that it's better to play those games than to beat each other up.

VIP

Continued from page 16

Q: *Brainstorm* is a tale of humankind overextending its reach. Before discussing the film, what's your impression of director Doug Trumbull, a man who has hitherto devoted his career primarily to creating special effects for films like *2001: A Space Odyssey, Close Encounters of the Third Kind,* and *Brainstorm?*

A: In Hollywood, "brilliance" is used far too often, and very carelessly. However, Doug is brilliant. For years he's been in the back room; the guy who is the reason behind the success of some of the directors who stand up and take bows with great alacrity.

Q: Tell us about the character you play.

A: He is to the manor born, a man from North Carolina with a scientific background. He decided to take the five thousand acres of North Carolina pine that he inherited and do something useful. So he created a research triangle, an environment for hi tech companies to come to North Carolina. He was able to divert the brain drain from Cambridge and Silicon Valley down there by giving the scientists elbow room to do whatever they wanted. In particular, he and one scientist from MIT have been working on a project for ten years. It involves computers and is a revolution in terms of the way human beings communicate. In fact, pertinent to what we were discussing before about the future of this medium, he says of it, "This is not just a bunch of computer games we're working on, it's bigger than that."

Q: Do you think that the computerized expanding and melding of minds is in our future?

A: It wouldn't surprise me. I'll have to ask Ray Kassar.

The brunt of a heartless prank pulled by fellow bakery workers, retardate Charly Gordon finds his locker filled with dough.

Cliff Robertson: actor, writer, director . . . and videogame buff!

Q: You've know Atari's chairperson for quite some time now.

A: For years. There's an interesting story. I met him many years ago in New York. He was born and raised in Brooklyn, got into the clothing industry and worked for Burlington Mills. He stayed there until he reached a high executive position and then decided that it might be wise to move on. I remember talking to him when he was considering some offers. And one of them was to work for a little-known company called Atari. I told him I thought it would be a great idea. He was reluctant to leave the New York area for San Francisco because his family lived here. I suggested strongly that he go; I'm always saying that to people who reach an impasse in their life and are hesitant to take a large step in a positive but unknown direction. My philosophy is "When in doubt — go." So he did. And his business acumen made that company what it is today. I believe that without Ray, Atari would never have become synonymous with videogames. As for companies taking Atari on, Ray's a formidable man. He'll keep them on top.

Q: You're an advocate of technology, but do you own a computer?

A: No. I love the concept of them, but running one terrifies me. Don't quote me on that, though; I'd hate for my own neurosis to reinforce fears any of your readers may have.

Q: What if we *do* quote you?

A: Then make sure you add that I'm willing to learn. Terror notwithstanding, when in doubt — go. ▲

you Read it Here First!

We've returned with a fresh selection of non-games, cartridges which don't exist — but should. They might not advance our culture one millimeter, but the staff would have endless fun with them. The way we look at it, if Odyssey and Atari can publish magazines about their games, we can publish games in our magazines.

How were these games selected? Simple. Thirty brutally clever ideas were shown to videogame fans around the nation, from which twenty-five were dismissed as absurd, unworkable, or dull. The remaining five are presented here. We won't tell you the words used to describe *them*.

David and Goliath

The kingdom builder vs. the Philistine champion. Armed with a slingshot, you run around rocky terrain, trying to strike the giant with a stone. You've got to hit him thirteen times before he goes down; he has only to smack you once with his spiked club.

You only have three rocks in your girdle. If you fling them off-screen, you're out of luck. Each time one smites the giant, you must recover it or reach for another, reload, and shoot again. Any hits below the gargantuan's waist do not count.

The player is allowed three Davids before the game ends. The trick is to stun Goliath in as short a time as possible.

L-5

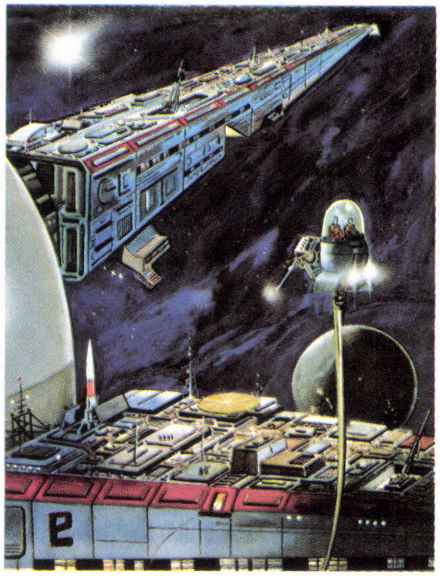
L-5 is the point in space at which the tug of the moon's gravity and the pull of the earth will hold an artificial planet between them.

Your task is to build an artificial world. There is no shooting or flying involved: you are at the controls of a master computer, directing various spaceships about their task.

Rock excavated from the moon is sighted on your radar, so you must dispatch the space scoops and catch the tons of debris. Once it has been recovered, the rock must be welded to other rock using the electron torch. This operation must be completed swiftly, for the radar shows that more rock is being flung from the moon.

In the meantime, you must juggle supplies coming from earth, placing prefab dwellings upon the budding planetoid in preparation for the first shuttle-load of inhabitants.

There is no time, no point score. You must successfully complete the task before that first ship of earth people arrives.



Quasimodo

Notre Dame will never be the same.

You take the side of the legendary Hunchback, having rescued Esmeralda from the hangman and now defending her from the riotous ranks of Parisians.

The measures you take are severe, but necessarily so: the populace is trying to batter down the door to the cathedral. At your disposal are an unlimited supply of flaming logs and three pots of boiling oil — the counterpart of *Defender's* smart bombs, ridding the screen of all your enemies. The object is to clobber as many of the mob as possible before they can make a hole in the door and enter.

As Quasimodo you can scale the walls, earning extra points for taunting the masses by climbing over the balustrade and hanging from the gargoyle beneath your position. But beware! Every once in a while Esmeralda feels a wave of guilt and tries to fling herself from the parapet. You are warned by her awful shriek — giving you only seconds to reach the wrongly-accused murderess and prevent the girl from dashing herself to the streets below.

Lassie

Timmy has gotten himself into real trouble now! He was trying to tip a nest of hummingbirds from a branch, when the limb cracked and sent him flying. He's clinging to the tree while raging rapids try to carry him toward a waterfall.

As Lassie, you have fifteen minutes to cross two hundred different terrains. There are various dangers such as mountain lions, steep cliffs to be climbed a narrow step-at-a-time, and hermits who have a liking for collie-fur mittens.

If you fail to make it home and get Gramps before time runs out, Timmy is all washed up.

You have three Lassies with which to make the strenuous journey.

Bobsled

A racing game to end all racing games!

You're in the front seat of the bobsled, on a course which the Olympic committee has condemned. But being an adventurous soul, you want to make the run.

As you speed along, melted ice can cause you to skid; rocks poking through the surface cause you to rattle or crash; tourists getting in the way cause you to swerve. Hitting any of these obstacles costs you points and slows you down.

All the while, you are spinning round and round. Thus, your view will be upside-down as often as it is right-side-up, or you may find yourself watching the world whiz by from the side walls of the run. In all, not a match for the faint-of-heart. ▲

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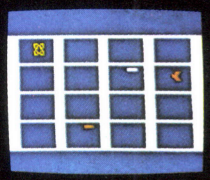
DON'T PLAY AROUND WITH IMITATIONS. ATARI GAMES ARE THE REAL THING.



GALACTIC MAP

First Space Invaders,* then Asteroids,™ now Star Raiders. All smash hit video games brought home by Atari, then copied by most everyone else. But mere sound-alikes and look-alikes are not play-alikes. Just compare ATARI Star Raiders with any of its offspring.

You'll discover that ATARI Star Raiders is the most involving, most challenging, most satisfying of them all.

For all the dazzle and flash out there, Atari's deep-space game has something more. Depth.

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